Recommendation

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

PART 90, SUBPART H – POLICIES GOVERNING ASSIGNMENT OF FREQUENCIES

Description

Part 90, subpart H provides detailed information concerning the polices under which the Commission assigns frequencies for the use of Part 90 licensees, frequency coordination requirements and procedures, and certain procedures under which licensees may cooperatively share radio facilities.[249]

Purpose

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

Analysis

Status of Competition

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

Advantages

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

Disadvantages

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

[249] 47 C.F.R. Part 90, subpart H.

Recent Efforts

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

Comments

No comments were filed with respect to this subpart.

Recommendation

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

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

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

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

PART 90, SUBPART I –GENERAL TECHNICAL STANDARDS

Description

Part 90, subpart I establishes the general technical requirements for the use of frequencies and equipment in the Part 90 radio services.[253] In general, the rules in subpart I: (1) establish equipment certification procedures; and (2) set standards for frequency tolerance, modulation, emissions, power, and bandwidths.

Purpose

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

Analysis

Status of Competition

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

Advantages

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

Disadvantages

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

Recent Efforts

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

Comments

No comments were filed with respect to this subpart.

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[253] 47 C.F.R. Part 90, subpart G.

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

Recommendation

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

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

Description

Part 90, subpart L governs the authorization and use of the 470-512 MHz band by both commercial and private land mobile stations.[255] This band is shared with television channels 14-20 and certain Part 22 radio services.[256] In the *Second Report and Order* in the Refarming proceeding, the Commission authorized centralized trunking in the 470-512 MHz band if a licensee has an exclusive service area or obtains consent from all co-channel and adjacent channel licensees and frequency coordination is obtained.[257] In 1997, the Commission created a General Access Pool to permit greater flexibility and foster more effective and efficient use of the 470-512 MHz band. Under current rules, all unassigned channels, including those that subsequently become unassigned, are considered to be in the General Access Pool and are available to all eligible licensees on a first-come, first-served basis. If a channel is assigned in an urbanized area, however, subsequent authorizations on that channel will only be granted to users from the same category.[258]

In general, the rules in subpart L: (1) specify the frequencies available for assignment in the 470-512 MHz band; (2) define the location of stations and service area of licenses in each frequency block; (3) establish maximum loading requirements for licensees; and (4) define technical limits on operation (*e.g.*, antenna height, transmitter power) to prevent interference. In accordance with these rules, new applicants may apply for only one channel at a time.[259] Licensees are required to show that any assigned channels in this band in a particular urbanized area are at full capacity before they can be assigned additional 470-512 MHz channels in that area.[260]

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

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

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

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

[259] 47 C.F.R. § 90.311.

[260] *Id.*

The rules in this subpart also specify the minimum allowable distance between co-channel stations.[261] For purposes of loading requirements, licensees in the 470-512 MHz band are divided into two groups: the Public Safety Pool and the Industrial/Business Pool.[262] After loading a channel to full capacity, a licensee may apply for another channel.[263] Current licensees may use existing loading to satisfy this requirement and apply for more than one channel at one time. Licensees that are operating above full capacity may use those units to qualify for additional channels.

Purpose

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

Analysis

Status of Competition

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

Advantages

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

Disadvantages

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

Recent Efforts

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

[261] 47 C.F.R. § 90.307.

[262] 47 C.F.R. § 90.313(a).

[263] 47 C.F.R. § 90.313(c).

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

Comments

No comments were filed with respect to this subpart.

Recommendation

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

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

Description

Part 90, subpart M contains licensing, technical, and operational rules for the Intelligent Transportation Systems (ITS) radio service. ITS radio service consists of two sub-categories: the Location and Monitoring Service (LMS) and the Dedicated Short Range Communications Service (DSRCS).[264]

In 1995, the Commission adopted service rules to provide for the establishment of a new LMS to encompass the old Automatic Vehicle Monitoring Service that was initiated in 1974. The Commission adopted rules for the licensing of LMS, primarily in the 902-928 MHz Band. In addition, the Commission determined that the definition of LMS would also include certain operations below 512 MHz. Unlike other LMS operations, however, LMS systems below 512 MHz may neither offer service to the public nor provide service on a commercial basis.[265]

LMS systems are used for such functions as vehicle tracking and location, automated toll collection, and other communications functions related to vehicles. In general, the subpart M rules: (1) specify the frequency bands in which LMS licensees operate; (2) define the service area of LMS licenses in each frequency band; (3) establish minimum construction or coverage requirements for LMS licensees; and (4) define technical limits on operation (*e.g.*, antenna height, transmitter power) to prevent interference.[266] The rules also establish limitations on LMS systems' interconnection with the public switched network and set forth a number of technical requirements intended to ensure successful coexistence of all the services authorized to operate in the band.

In June 1998, the Transportation Equity Act for the 21st Century[267] required the Commission to consider the spectrum needs of intelligent transportation systems, in particular for dedicated, short-range communications. In October 1999, the Commission allocated seventy-five megahertz of spectrum for use by DSRCS systems operating in the ITS Radio Service.[268] The Commission amended subpart M by adding technical rules establishing power, emission, and frequency stability limits for DSRCS operations but deferred consideration of DSRCS licensing and service rules and spectrum channelization

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[264] 47 C.F.R. Part 90, subpart M.

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

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

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

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

plans to a later proceeding because the standards addressing those matters were still being developed by the U.S. Department of Transportation (DOT). In July 2002, the Intelligent Transportation Society of America (ITS America), the Federal Advisory Committee to DOT, submitted recommendations to the Commission concerning the development of the licensing and service rules. On November 15, 2002, the Commission released its *DSRCS Notice of Proposed Rulemaking* seeking comment on a variety of issues concerning the development of the licensing and service rules, including the recommendations of ITS America.[269]

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

Purpose

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

Analysis

Status of Competition

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

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

[270] Amendment of the Commission's Rules Regarding Dedicated Short-Range Communication Services in the 5.850-5.925 GHz Band (5.9 GHz Band), WT Docket No. 01-90, *Report and Order*, 19 FCC Rcd 2458 (2004) (*DSRCS Report and Order*).

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

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

Advantages

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

Disadvantages

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

Recent Efforts

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

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

Comments

No comments were filed with respect to this subpart.

Recommendation

Because LMS Wireless' comments raise reallocation questions and other issues involving the creation of new rules that are more in the nature of a petition for rulemaking or

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

[272] *See DSCRS Report and Order, supra* note 270.

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

waiver request than a review to modify or eliminate existing rules, staff concludes that these comments are beyond the scope of this Biennial Review proceeding and recommends that they be considered in the various dockets as appropriate.

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

PART 90, SUBPART N – OPERATING REQUIREMENTS

Description

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

Purpose

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

Analysis

Status of Competition

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

Advantages

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

Disadvantages

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

Recent Efforts

The Commission reviewed subpart N as part of the recently concluded Part 90 Biennial Regulatory Review proceeding.[275]

Comments

No comments were filed with respect to this subpart.

Recommendation

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

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

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

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

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

Description

Part 90, subpart P contains licensing, technical, and operational rules for paging operations in the 929 MHz Band.[276] This rule part includes services such as commercial paging and private carrier paging (PCP). Licensees may operate on exclusive channels or designated shared channels on a CMRS or PMRS basis.

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

The Commission has made significant changes to its Part 90, subpart P rules in recent years. In the mid-1990s, the Commission converted the authorization of stations in the 929 MHz Band from the original site-by-site procedure to a geographic area licensing process. The *Second Report and Order* established geographic area licensing for 929 MHz paging and adopted competitive bidding procedures.[277] The *Third Report and Order* changed the geographic area licensing of 929 MHz paging from MTAs to MEAs, clarified that spectrum will automatically revert to the geographic area licensee in all instances in which a non-geographic area incumbent licensee permanently discontinues service, and allowed geographic area licensees to partition their licenses and disaggregate the spectrum.[278] The Commission auctioned geographic licenses for the exclusive channels in the 929 MHz band.[279] Furthermore, the Part 22 Rules regarding paging now apply to all 929 MHz licensees on exclusive channels and, in 1999, the application filing rules were moved from this subpart to Part 1 in connection with implementation of electronic filing procedures and the Universal Licensing System.

Purpose

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

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[276] 47 C.F.R. Part 90, subpart P.

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

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

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

Analysis

Status of Competition

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

Advantages

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

Disadvantages

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

Recent Efforts

None.

Comments

No comments were filed with respect to this subpart.

Recommendation

The Part 90, subpart P rules concern licensing, technical, and operational rules, such as technical and operational standards and interference-related issues among Part 90 licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 90 rules are "no longer necessary

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

[281] *Id.*

[282] *Id.*

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

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

Description

Subpart S contains licensing, technical, and operational rules for the 800 MHz and 900 MHz Specialized Mobile Radio (SMR) services, as well as non-commercial services above 800 MHz, *i.e.*, public safety services and services that are used by utilities, transportation companies, and other businesses for internal purposes.[283] With the passage of the Omnibus Budget Reconciliation Act (OBRA), Congress reclassified 800 MHz and 900 MHz SMR services as CMRS, and required all CMRS providers to be regulated as common carriers.[284]

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

Subparts U and V[285] contain competitive bidding rules and procedures for the 900 MHz SMR and 800 MHz SMR services, respectively. The rules in these subparts: (1) identify the licenses to be sold by competitive bidding; (2) establish the competitive bidding mechanisms to be used in 800 and 900 MHz SMR auctions; (3) establish application, disclosure, and certification procedures for short- and long-form applications; (4) specify down payment, withdrawal, and default mechanisms; (5) provide definitions of gross revenues for designated entities and specify the bidding credits for which designated entities qualify; and (6) provide eligibility and technical requirements for partitioning and disaggregation.

Purpose

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

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[283] 47 C.F.R. Part 90, subpart S.

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

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

Analysis

Status of Competition

As detailed in the *Ninth CMRS Competition Report*, Part 90 SMR providers operate in an environment that is marked by significant and increasing competition in mobile telephony and mobile data.[286] Some of the larger SMR carriers, particularly Nextel and Southern, provide digital wide-area voice services that compete with cellular and broadband PCS. Other SMR carriers provide more traditional dispatch service on a local or regional basis. Although SMR channels have been used primarily for voice communications, systems have also been developed to carry data and facsimile services. Additionally, new digital SMR technology is leading to the development of new features and services, such as two-way acknowledgment paging, teleconferencing, and voicemail.

Advantages

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

Disadvantages

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

Recent Efforts

In March, 2002, the Commission issued a *Notice of Proposed Rulemaking* seeking comment on and proposals for how best to remedy interference to 800 MHz public safety systems, including addressing various possible means of reconfiguring the 800 MHz band to eliminate or reduce interference.[287] In August 2004, the Commission issued a *Report and Order* establishing technical and procedural rules to remedy interference to 800 MHz public safety systems, including reconfiguring the 800 MHz band to eliminate or reduce interference.[288]

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

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

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

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

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

Comments

No comments were filed with respect to this subpart.

Recommendation

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

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

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

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

Description

Part 90, subpart T contains licensing, technical, and operational rules for the 220-222 MHz (220 MHz) service.[291] In general, the rules in this part: (1) define the service area of 220 MHz licenses; (2) specify the permissible operations for authorized systems; (3) specify the frequencies available to 220 MHz licensees; (4) establish license terms; (5) establish the minimum construction or coverage requirements for 220 MHz licensees; and (6) define technical limits on operation (*e.g.*, antenna height, field strength) to prevent interference.

Part 90, subpart W contains competitive bidding rules and procedures for commercial licenses in the 220 MHz service.[292] The rules in this subpart: (1) specify which 220 MHz licenses are eligible for competitive bidding; (2) establish the competitive bidding mechanisms to be used in 220 MHz auctions; (3) establish application, disclosure, and certification procedures for short- and long-form applications; and (4) specify down payment, withdrawal, and default mechanisms.

In several orders, the Commission has taken steps to reduce regulatory burdens and afford greater flexibility to 220 MHz licensees. For example, the original 220 MHz rules required licensees to provide two-way land mobile service on a primary basis, and allowed use of the band for fixed services or for paging only on an "ancillary" basis. In the 1997 *220 MHz Third Report and Order*, the Commission eliminated the ancillary use limitation, thus allowing licensees to provide any or all of these services on a co-primary basis.[293] The Commission has also adopted rules permitting partitioning and disaggregation of 220 MHz licenses, and has eliminated the "40-mile rule" that previously limited the number of site-based licenses that an individual licensee could hold in a given geographic area.[294] Finally, in 1998 the Commission eliminated mandatory spectrum efficiency standards that had previously been adopted for provision of voice and data over 220 MHz systems that combined contiguous 5 kHz channels.[295] The Commission concluded that mandating technical standards was unnecessary because

[291] 47 C.F.R. Part 90, subpart T.

[292] 47 C.F.R. Part 90, subpart W.

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

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

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

market forces would spur efficient spectrum use, and that retaining mandatory standards could impair rather than encourage technical innovation.[296]

Purpose

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

Analysis

Status of Competition

Licensees in the 220 MHz service are permitted to provide voice, data, paging, and fixed communications. Many 220 MHz licensees have begun to deploy their networks, and traditional dispatch services are being increasingly offered in this band and other non-SMR bands. Although the 220 MHz band has narrow channelization and equipment availability for voice operations continues to be a problem for existing licensees, there is potential for the 220 MHz service to be increasingly competitive and to contribute to inter-service CMRS competition.

Advantages

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

Disadvantages

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

Recent Efforts

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

[296] *Id.*

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

In January, 2004, the Commission issued the *Streamlining and Harmonization NPRM*, and proposed to eliminate section 90.737, which requires the filing of supplemental progress reports for 220 MHz Phase I licensees[298] and update the license term for Phase I non-nationwide licensees from five years to tens years. [299]

Comments

No comments were filed with respect to this subpart.

Recommendation

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

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

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

[299] *Id.* at ¶ 55.

PART 95, SUBPART F – 218-219 MHZ SERVICE

Description

For purposes of the Biennial Regulatory Review, the analysis of Part 95 in this report focuses on the 218-219 MHz Service (subpart F), which is unique among the Personal Radio Services in that it may be used for commercial applications, is licensed on a geographic exclusive-use basis, and its licensure is subject to the Commission's competitive bidding procedures. Part 95[300] contains licensing, technical, and operational rules for the Personal Radio Services, a collection of wireless services that are generally used by individuals for personal communications and to support the radio needs of their activities and interests.

Subpart F was originally created to support the Interactive Video and Data Service (IVDS), a short-distance communications service by which licensees could provide information, products, or services to, and allow interactive responses from, subscribers within the licensees' service area. In 1998, the Commission renamed IVDS the 218-219 MHz Service and revised subpart F to allow 218-219 MHz licensees greater flexibility to identify and structure services in response to market demand.[301] Under the current service rules, both common carrier and private operations are permitted, and both one- and two-way communications are allowed.

The licensing and technical rules for the 218-219 MHz Service are contained in subpart F, although certain rules that are broadly applicable to all wireless telecommunications services (including the 218-219 MHz Service) have been consolidated in Part 1.[302]

Purpose

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

Analysis

Status of Competition

The original IVDS service was generally not commercially successful, and little or no competition emerged to use the 218-219 MHz band to provide interactive television applications. Under the revised service rules, 218-219 MHz Service licensees have proposed wireless data applications such as meter reading and vehicle tracking services.

[300] 47 C.F.R. Part 95.

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

[302] 47 C.F.R. Part 1.