

conditions of their authorizations are normally considered to be non-interfering, and provides for Commission action, after notice and hearing, to require modifications to eliminate significant interference. In view of the variety of services that might be provided by Part 27 licensees, including services in the 47 GHz band, we solicit comment on whether we should retain this rule. We seek comment, for example, regarding whether interference protection can be guaranteed and whether this rule, if retained, should be changed to direct adjacent service area licensees to cooperate to eliminate or ameliorate interference. This alternative would require each licensee ultimately to assume responsibility for protecting its own receiving system from interference from transmitters in adjoining areas that meet our standards. We also seek comment on whether we should apply any changes with respect to Section 27.64 to the 2.3 GHz band.²⁰⁹

3. Out-of-Band and Spurious Emission Limits

130. Generally, different types of technical parameters would be used to limit out-of-band and spurious emissions to ensure interference protection of services outside the licensee's assigned spectrum, depending on whether the system involves fixed, mobile, or other communications. Because we are proposing to permit licensees in the 47 GHz band to use the spectrum for the various services listed in the U.S. Table of Allocations, it would appear we should develop technical operating parameters that can accommodate each type of communications, as the Commission did in adopting separate and different emissions limits in Section 27.53 of the Commission's Rules²¹⁰ for the 2.3 GHz band.²¹¹ We tentatively conclude that, unlike the situation in the 2.3 GHz band, there is insufficient likelihood for adjacent channel interference from operations in the 47 GHz band that would require different rules for different categories of service.

131. We propose to require licensees in the 47 GHz band to attenuate the power below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ or 80 decibels, whichever is less, for any emission on all frequencies outside the licensee's authorized channel.²¹² The Commission adopted this level in Section 27.53 for certain Part 27 operations, noting that this attenuation is commonly employed in other services and that it has been found to adequately prevent adjacent channel interference as a general matter.²¹³ We request comment on this

²⁰⁹ Cf. 47 C.F.R. § 22.352, which governs predominantly mobile operations.

²¹⁰ 47 C.F.R. § 27.53.

²¹¹ See *Part 27 Report and Order*, 12 FCC Rcd at 10854-57 (paras. 136-144). The Commission was required to adopt a more stringent level of attenuation in order to adequately protect satellite Digital Audio Radio Service reception, among other concerns, from WCS transmissions. *Id.* at 10855 (para. 138).

²¹² See Appendix B, Proposed Section 27.53(c) of the Commission's Rules, 47 C.F.R. § 27.53(c).

²¹³ 47 C.F.R. § 27.53(a)(3); see also *Part 27 Report and Order*, 12 FCC Rcd at 10857 (para. 144), citing 47 C.F.R. §§ 22.359(iii), 22.917(e), 24.238.

proposal and any other emission limits that commenters believe are appropriate, including the possibility of establishing an absolute power limit. We seek comment in particular on whether this proposed standard is appropriate in the context of the services likely to evolve in the 47 GHz band and, if not, what standard should be adopted. We also note that the specifications for standards will be especially important if power levels are adopted for each of the permitted services and these power levels are orders of magnitude different.

4. RF Safety

132. Section 27.52 of the Commission's Rules²¹⁴ subjects licensees and manufacturers to the RF radiation exposure requirements specified in Sections 1.1307(b), 2.1091, and 2.1093 of the Commission's Rules, which list the services and devices for which an environmental evaluation must be performed.²¹⁵ In adopting the rule, the Commission concluded that routine environmental evaluations for RF exposure are required by applicants desiring to use the following types of transmitters: (1) fixed operations, including base stations and radiolocation transmitters, when the effective radiated power (ERP) is greater than 1,000 watts; (2) all portable devices; and (3) mobile devices, if the ERP of the station, in its normal configuration, will be 1.5 watts or greater.²¹⁶

133. With regard to RF safety requirements, we propose to treat services and devices in the 47 GHz band in a comparable manner to other services and devices that have similar operating characteristics. We tentatively conclude that the requirements in Section 27.52 that the Commission adopted for licensees in the 2.3 GHz band will apply to the same extent to licensees in the 47 GHz band. As the Commission has previously stated, the Commission is providing guidance on acceptable methods of evaluating compliance with the Commission's exposure limits in OET Bulletin 65, which has replaced OST Bulletin No. 65.²¹⁷

²¹⁴ 47 C.F.R. § 27.52.

²¹⁵ See *Part 27 Report and Order*, 12 FCC Rcd at 10861-62 (paras. 153-154), citing 47 C.F.R. §§ 1.1307(b), 2.1091, 2.1093. The RF radiation exposure limits are set forth in 47 C.F.R. §§ 1.1310, 2.1091, and 2.1093, as modified in *Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, ET Docket No. 93-62, Report and Order, 11 FCC Rcd 15123 (1996); First Memorandum Opinion and Order, 11 FCC Rcd 17512 (1997); Second Memorandum Opinion and Order, 12 FCC Rcd 13494 (1997) (*RF Guidelines Second Reconsideration Order*).

²¹⁶ *Part 27 Report and Order*, 12 FCC Rcd at 10861 (para. 154 n.344), noting that 1,000 watts ERP equates to 1,640 watts EIRP. In the *RF Guidelines Second Reconsideration Order*, the Commission increased the exclusion threshold for mobile devices operating above 1.5 GHz from 1.5 watts to 3 watts EIRP. *RF Guidelines Second Reconsideration Order*, 12 FCC Rcd at 13514 (para. 51).

²¹⁷ *Part 27 Report and Order*, 12 FCC Rcd at 10862 (para. 154 n.346). OET Bulletin No. 65 (Edition 97-01) was issued on August 25, 1997. It is available for downloading at the FCC Web Site: www.fcc.gov/oet/rfsafety. Copies of OET Bulletin No. 65 also may be obtained by calling the FCC RF Safety Line at (202) 418-2464.

134. The Commission adopted the 1,000 watts ERP threshold for 2.3 GHz because of the flexibility with respect to use, power, location, and other factors, and determined that this power limit was appropriate to ensure compliance with the Commission's RF exposure standards for most situations.²¹⁸ Moreover, the Commission found the 1,000 watts ERP threshold consistent with its existing rules for transmitters and devices of comparable use and similar operating frequencies. For the same reasons, we propose to adopt the 1,000 watts ERP threshold for operations in 47 GHz band. Consistent with the modifications the Commission adopted for the 2.3 GHz band, we also propose to modify Sections 1.1307(b), 2.1091, and 2.1093 of the Commission's Rules to include services and devices applicable to the 47 GHz band. We invite comment on our proposals and any alternatives.

5. Stratospheric Services

135. The recently concluded WRC-97 considered changes to the international Radio Regulations and adopted several provisions dealing with stratospheric-based platforms.²¹⁹ The WRC adopted a definition for these stations, calling them High Altitude Platform Stations, which reads as follows: "A station located on an object at an altitude of 20 to 50 km and at a specified, fixed point relative to the Earth." We propose to adopt this same nomenclature and to place the new definition of these stations adopted at WRC-97 in Part 27 of the Commission's Rules.²²⁰ For simplicity of discussion, however, we shall continue to refer to these stations as stratospheric platforms in this Notice.

136. The Sky Station proposal raises a number of technical issues that must be resolved. Sky Station requests that we amend certain service rules to accommodate its stratospheric fixed service and identifies several changes that it urges the Commission to adopt in this proceeding.²²¹ We seek comment generally on whether any particular regulatory provisions are necessary to accommodate high altitude stratospheric platforms, and to what extent such provisions may limit the use of the 47 GHz band by other technologies, such as satellites. We do not intend to prescribe rules that limit the range of potential uses of this band, except when technical considerations necessitate a specification that inherently accommodates one approach at the expense of another. In those circumstances, we expect to accommodate the anticipated use of high altitude platforms, but such determinations will be made in the context of specific rules. In particular, we seek comment on the following issues.

²¹⁸ *Part 27 Report and Order*, 12 FCC Rcd at 10862 (para. 154 n.345), noting that, in a pending petition for reconsideration of the *RF Guidelines Report and Order*, the Commission was considering whether to revise the threshold for requiring routine evaluation of mobile devices above 1.5 GHz from 1.5 watts to 3 watts. This change was made in the *RF Guidelines Second Reconsideration Order*.

²¹⁹ See para. 10, *supra*.

²²⁰ See Appendix B, Proposed Section 27.4 of the Commission's Rules, 47 C.F.R. § 27.4.

²²¹ Sky Station Further Comments to Petition for Rulemaking (Dec. 24, 1996) at 10-12.

a. Frequency Coordination

137. Sky Station has stated that co-channel frequency sharing of stratospheric platform systems with traditional fixed services is not possible in the same geographic area. With the Commission's decision to license stations in the 47 GHz band on a wide-area basis, the issue of sharing can be focussed on sharing at the boundaries of a service area, and for adjacent channel sharing in the same geographic area. In our earlier discussion regarding in-band interference control, we focused primarily on coordination procedures contained in Section 101.103 of the Commission's Rules, which relate to stations that are located on the surface of the earth. The introduction of stratospheric stations, however, adds an entirely new dimension to the coordination process.

138. We seek comment on how coordination should be effected between licensees of stratospheric stations licensed in one area with land-based stations of another licensee in an adjacent service area. Additionally, because stratospheric platform stations could be sharing the same frequency bands with stations of the Fixed-Satellite Service operating in the earth-to-space direction, we seek comment on appropriate procedures for coordinating these operations, including the imposition of any technical sharing criteria on either service.

b. Emission and Power Limitations

139. With respect to out-of-band emissions, we have tentatively proposed to require licensees to attenuate the power below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ or 80 decibels, whichever is less, for any emission on all frequencies outside the licensee's authorized channel, to facilitate adjacent channel sharing.²²² We request comment on whether these limits are appropriate for 47 GHz stations located on the surface of the earth, or whether an absolute power limit is preferable and, if so, what it should be. The situation with respect to stations located on stratospheric platforms is somewhat different. We request comment on the appropriate out-of-band emission limits to place on stations located on stratospheric platforms that would be necessary to protect the adjacent channel operations of both traditional fixed services and other stratospheric services, as well as other services that may be provided in this band. We seek comment on these issues.

c. Field Strength Limits

140. As discussed earlier, the Commission's rules for field strength limits at service area boundaries were derived from a model that assumed all stations to be located on the surface of the earth. These field strengths were initially derived to provide a minimal quality of service, assuming a mobile service. Stratospheric platform stations, as envisioned by Sky Station, obviously differ from this previously adopted model and, therefore, may require

²²² See paras. 130-131, *supra*.

altogether different considerations. We seek comment specifically on how services provided from stratospheric platforms can operate on a co-channel basis with adjacent service area licensees, especially if the adjacent service area licensee is providing traditional ground-based fixed services.

141. One consideration could be to place power-flux-density limits at the surface of the earth at service area boundaries. Comment is requested on whether this is a reasonable approach, and if so, what such a limit might be. In addition, because we are considering stations located on stratospheric platforms to be part of the terrestrial fixed service, we seek comment on how the rules the Commission adopted concerning "Quiet Zones" in Section 27.61 of the Commission's Rules²²³ should be applied to such stations.²²⁴

d. Public Safety Issues

142. Sky Station's proposed communications service, as described in its application, would be provided by multi-ton platforms suspended by balloons floating in the stratosphere over major cities across the Nation. The possibility that these platforms, or parts of them, could fail may present a significant safety concern. Launching and retrieving the platforms may present dangers to aviation. Sky Station asserts that it is coordinating with Federal Aviation Administration (FAA) officials with respect to any necessary approvals, and that its platforms are designed with multiple redundant safety features that will eliminate the risk of injury or harm to airplanes or people on the ground. It also claims that any damage on Earth is no more likely to occur than from satellite launch and de-orbit operations.²²⁵

143. Motorola argues that the Sky Station proposal presents grave safety concerns raised by the size of the platforms, their untested technology, and the fact that the platforms would essentially be stationary over major cities.²²⁶ It further claims that Sky Station has not dispelled these concerns or supported its assertions regarding the safety of the platforms with any quantitative analysis or computer simulation studies.²²⁷

144. Because stratospheric platforms are a novel technology, we do not presently have a basis or the experience on which to assess this issue. We request comment on the safety concerns that stratospheric platforms may raise, and how we should assure that the platforms are physically safe before granting permission for operation. For example, applicants could be required to report on measures to protect the public and demonstrate the safety of their

²²³ 47 C.F.R. § 27.61.

²²⁴ *Part 27 Report and Order*, Appendix B, adopting 47 C.F.R. § 27.61.

²²⁵ Sky Station Reply Comments to Petition (May 16, 1996) at 10-11.

²²⁶ Motorola Comments to Petition (May 1, 1996) at 5.

²²⁷ Motorola Reply Comments to Petition (May 16, 1996) at 3-5.

operations. What regulatory bodies or private standard-setting organizations, if any, would be responsible for certifying the safety of these platforms? Should stratospheric platforms and other new technologies that present new safety risks be subject to strict liability and required to provide proof of adequate insurance to compensate for damage and injury? We request comment on these and other public safety issues raised by the Sky Station proposal and on possible solutions.

F. Competitive Bidding Procedures

1. Statutory Requirements

145. We tentatively conclude that, pursuant to the Balanced Budget Act of 1997, mutually exclusive applications for initial licenses for the 47 GHz band are required to be resolved through competitive bidding.²²⁸ We base this on the fact that the 47 GHz band is not intended to be licensed for the following purposes: (1) public safety radio services licenses, including (a) private internal radio services used by State and local government entities; and (b) emergency road services provided by not-for-profit organizations; (2) digital television service licenses to be provided by terrestrial broadcast licensees to replace their analog service licenses; or (3) non-commercial educational broadcast stations or public broadcast stations. We seek comment on this view. Commenters should specifically address the requirements of the Balanced Budget Act of 1997.

2. Incorporation by Reference of Part 1 Standardized Auction Rules

146. In the *Part 1 Third Report and Order*, the Commission streamlined its auction procedures by adopting general competitive bidding rules applicable to all auctionable services²²⁹ and, in the same proceeding, issued a *Second Further Notice of Proposed Rule Making* concerning designated entities and attribution rules, among other issues.²³⁰ We propose to conduct the auction for initial licenses in the 47 GHz band in conformity with the general competitive bidding rules set forth in Part 1, subpart Q of the Commission's Rules, and substantially consistent with the bidding procedures that have been employed in previous Commission auctions. Specifically, we propose to employ the Part 1 rules governing designated entities, application issues, payment issues, competitive bidding design, procedure and timing issues, and anti-collusion. These rules would be subject to any modifications that the Commission adopts in relation to the *Second Further Notice of Proposed Rule Making*. We seek comment on this proposal and on whether any of our Part 1 Rules would be inappropriate in an auction for this service.

²²⁸ See 47 U.S.C. §§ 309(j)(1), 309(j)(2), as amended by the Balanced Budget Act of 1997.

²²⁹ *Part 1 Third Report and Order*, 13 FCC Rcd at 374-470 (paras. 4-169).

²³⁰ *Id.* at 471-82 (paras. 170-195).

3. Provisions for Designated Entities

a. Background

147. The Communications Act provides that, in developing competitive bidding procedures, the Commission shall consider various statutory objectives and consider several alternative methods for achieving them.²³¹ Specifically, the statute provides that, in establishing eligibility criteria and bidding methodologies, the Commission shall:²³²

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 of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women.

b. Small Business Definitions

148. In the *Competitive Bidding Second Memorandum Opinion and Order*, the Commission stated that it would define eligibility requirements for small businesses on a service-specific basis, taking into account the capital requirements and other characteristics of each particular service in establishing the appropriate threshold.²³³ The *Part 1 Third Report and Order*, while it standardizes many auction rules, provides that the Commission will continue a service-by-service approach to defining small businesses. For the 47 GHz band, we propose to adopt the definitions the Commission adopted for broadband PCS for small and very small businesses,²³⁴ which the Commission also adopted for 2.3 GHz and 39 GHz applicants.²³⁵ We tentatively conclude that the capital requirements are likely to be similar to the capital requirements in those services. Specifically, we propose to define a small business as any firm with average annual gross revenues for the three preceding years not in excess of \$40 million.

149. We observe that the capital costs of operational facilities in the 47 GHz band are likely to vary widely. Accordingly, we seek to adopt small business size standards that afford

²³¹ See 47 U.S.C. §§ 309(j)(3), 309(j)(4).

²³² 47 U.S.C. § 309(j)(3)(B).

²³³ Implementation of Section 309(j) of the Communications Act – Competitive Bidding, PP Docket No. 93-253, Second Memorandum Opinion and Order, 9 FCC Rcd 7245, 7269 (para. 145) (1994) (*Competitive Bidding Second Memorandum Opinion and Order*).

²³⁴ Implementation of Section 309(j) of the Communications Act – Competitive Bidding, PP Docket No. 93-253, Fifth Memorandum Opinion and Order, 10 FCC Rcd 403 (1994).

²³⁵ 47 C.F.R. §§ 27.210(b)(1), 27.210(b)(2), 101.1209(b)(1)(i).

licensees the greatest flexibility. Thus, in addition to our proposal to adopt the general small business standard the Commission used in the case of broadband PCS, 2.3 GHz, and 39 GHz licenses, we propose to adopt the definition for very small businesses used for 39 GHz licenses and for the PCS F Block licenses: businesses with average annual gross revenues for the three preceding years not in excess of \$15 million.

150. We seek comment on the use of these standards for services licensed in the 47 GHz band, with particular focus on the appropriate definitions of small and very small businesses as they relate to the size of the geographic area to be covered and the spectrum allocated to each license. In discussing these issues, commenters are requested to address the expected capital requirements for services in the 47 GHz band. Commenters are invited to use comparisons with other services for which the Commission has already established auction procedures as a basis for their comments regarding the appropriate definitions for small and very small businesses. We also seek comment on whether the proposed designated entity provisions, if adopted and applied to this service, would be sufficient to promote participation by businesses owned by minorities and by women, and participation by rural telephone companies. To the extent that commenters propose additional provisions to ensure participation by minority-owned and women-owned businesses, we also invite them to address how such provisions should be crafted to meet the relevant standards of judicial review.²³⁶

151. In all other respects, we propose to apply the competitive bidding procedures that the Commission adopted in the *Part 1 Third Report and Order*, subject to any modifications the Commission adopts in response to the *Second Further Notice of Proposed Rule Making*.²³⁷

V. PROCEDURAL MATTERS

A. Initial Regulatory Flexibility Analysis

152. As required by Section 603 of the Regulatory Flexibility Act of 1980 (RFA),²³⁸ the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in the Notice.²³⁹ We request written public comment on the analysis. In order to fulfill the mandate of the Contract with America Advancement Act of 1996 regarding the Final Regulatory

²³⁶ See *Adarand Constructors v. Peña*, 515 U.S. 200 (1995); *United States v. Virginia*, 116 S.Ct. 2264 (1996).

²³⁷ See *Part 1 Third Report and Order*, 13 FCC Rcd at 386-409 (paras. 13-57).

²³⁸ 5 U.S.C. § 603.

²³⁹ See Appendix A.

Flexibility Analysis, we ask a number of questions in our IRFA regarding the prevalence of small businesses in the affected industries.

153. Comments must be filed in accordance with the same filing deadlines as comments filed in this rulemaking proceeding, but they must have a separate and distinct heading designating them as responses to the IRFA. The Commission's Office of Public Affairs, Reference Operations Division, shall send a copy of this Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with Section 603(a) of the RFA.

B. Paperwork Reduction Analysis

154. This Notice contains either a proposed or modified information collection. As part of our continuing effort to reduce paperwork burdens, we invite the general public and the Office of Management and Budget (OMB) to take this opportunity to comment on the information collections contained in this Notice, as required by the Paperwork Reduction Act of 1995.²⁴⁰ Public and agency comments are due at the same time as other comments on this Notice; OMB comments are due 60 days from the date of publication of this Notice in the Federal Register. Comments should address:

- Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility.
- The accuracy of the Commission's burden estimates.
- Ways to enhance the quality, utility, and clarity of the information collected.
- Ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

155. Written comments by the public on the proposed or modified information collections are due on September 21, 1998. Written comments must be submitted by the OMB on the proposed or modified information collections on or before 60 days after the date of publication in the Federal Register. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Judy Boley, Federal Communications Commission, Room 234, 1919 M Street, N.W., Washington, D.C. 20554, or via the Internet to jboley@fcc.gov, and to Timothy Fain, OMB Desk Officer,

²⁴⁰ Pub. L. No. 104-13.

10236 New Executive Office Building, 725 Seventeenth Street, N. W., Washington, D.C.
20503, or via the Internet to fain_t@al.eop.gov.

C. Ex Parte Presentations

156. For purposes of this permit-but-disclose notice and comment rulemaking proceeding, members of the public are advised that *ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed under the Commission's Rules.²⁴¹

D. Pleading Dates

157. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules,²⁴² interested parties may file comments on or before September 21, 1998, and reply comments on or before October 13, 1998. Comments and reply comments should be filed in WT Docket No. 98-136. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. To file formally in this proceeding, interested parties must file an original and four copies of all comments, reply comments, and supporting comments. If interested parties want each Commissioner to receive a personal copy of their comments, they must file an original plus nine copies. Interested parties should send comments and reply comments to the Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554.

158. Comments may also be filed using the Commission's Electronic Comment Filing System (ECFS).²⁴³ Comments filed through the ECFS can be sent as an electronic file via the Internet to <<http://www.fcc.gov/e-file/ecfs.html>>. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet E-Mail. To obtain filing instructions for E-Mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your E-Mail address.>" A sample form and directions will be sent in reply.

159. Comments and reply comments will be available for public inspection during regular business hours at the FCC Reference Center, Room 239, at the Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554. Copies of comments and reply comments are available through the Commission's duplicating contractor: International Transcription Service, Inc. (ITS, Inc.), 1231 20th Street, N.W., Washington, D.C. 20036, (202) 857-3800.

²⁴¹ See generally 47 C.F.R. §§ 1.1202, 1.1203, 1.1206(a).

²⁴² 47 C.F.R. §§ 1.415, 1.419.

²⁴³ See Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24,121 (1998).

E. Further Information

160. For further information concerning this rulemaking proceeding, contact Stan Wiggins, Eli Johnson, or Ed Jacobs at (202) 418-1310, Wireless Telecommunications Bureau, Federal Communications Commission, Washington, D.C. 20554.

VI. ORDERING CLAUSES

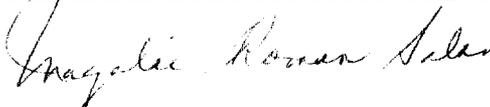
161. Accordingly, IT IS ORDERED that the Petition for Reconsideration of Amendment of Parts 2 and 15 of the Commission's Rules To Permit Use of Radio Frequencies Above 40 GHz for New Radio Applications, ET Docket No. 94-124, RM-8308, Second Report and Order, 12 FCC Rcd 10571 (1997), filed by Hughes Communications, Inc., Motorola Satellite Systems, Inc., TRW, Inc., and GE American Communications, Inc., IS DENIED.

162. IT IS FURTHER ORDERED that these actions ARE TAKEN pursuant to Sections 1, 4(i), 7, 10, 201, 202, 208, 214, 301, 303, 308, 309(j), and 310 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 157, 160, 201, 202, 208, 214, 301, 303, 308, 309(j), 310.

163. IT IS FURTHER ORDERED that NOTICE IS HEREBY GIVEN of the proposed regulatory changes described above and in Appendix B, and that comment is sought on these proposals.

164. IT IS FURTHER ORDERED that the Commission's Office of Public Affairs, Reference Operations Division, SHALL SEND a copy of the Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with Section 603(a) of the Regulatory Flexibility Act of 1980, Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. §§ 601-612 (1980).

FEDERAL COMMUNICATIONS COMMISSION



Magalie Roman Salas
Secretary

Appendix A**Initial Regulatory Flexibility Analysis**

As required by Section 603 of the Regulatory Flexibility Act (RFA),¹ the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this Notice of Proposed Rulemaking (Notice), WT Docket No. 98-136. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice. The Commission will send a copy of the Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with the RFA.² In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need for, and Objectives of, the Proposed Rules

This rulemaking is being initiated to adopt certain service, licensing, and competitive bidding rules for the 47.2-48.2 GHz (47 GHz) band. In the *Second Report and Order* in this proceeding, the Commission opened this band for commercial use and determined to license this spectrum under a flexible framework that permits this band to be used for all services permitted under the U.S. Table of Allocations. In particular, in this Notice, we propose to license the 47 GHz band under Part 27 of the Commission's Rules, as modified to reflect the particular characteristics and circumstances of services offered through the use of spectrum in the 47 GHz band. We believe that this approach will encourage new and innovative services and technologies in this band without significantly limiting the range of potential uses for this spectrum.

Our objectives for the Notice are: (1) to accommodate the introduction of new uses of spectrum and the enhancement of existing uses; (2) encourage commercial development of equipment that can operate in frequency bands above 40 GHz; and (3) to facilitate the awarding of licenses to entities who value them the most. The Commission also seeks to ensure a regulatory plan for the 47 GHz band that will allow for the efficient licensing and use of the band, eliminate unnecessary regulatory burdens, enhance the competitive potential of the band, and provide a wide variety of radio services to the public.

¹ 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAA). Title II of the CWAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

² 5 U.S.C. § 603(a).

³ *See id.*

B. Legal Basis for Proposed Rules

The proposed action is authorized under Sections 1, 4(i), 7, 10, 201, 202, 208, 214, 301, 303, 308, 309(j), and 310 of the Communications Act of 1934, 47 U.S.C. §§ 151, 154(i), 157, 160, 201, 202, 208, 214, 301, 303, 308, 309(j), 310.

C. Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply

For the purposes of this Notice, the RFA defines a "small business" to be the same as a "small business concern" under the Small Business Act,⁴ unless the Commission has developed one or more definitions that are appropriate to its activities.⁵ Under the Small Business Act, a "small business concern" is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) meets any additional criteria established by the Small Business Administration (SBA).⁶

The proposals in the Notice affect applicants who wish to provide services in the 47 GHz band. Pursuant to 47 C.F.R. § 24.720(b), the Commission has defined "small entity" for Blocks C and F broadband PCS licensees as firms that had average gross revenues of less than \$40 million in the three previous calendar years. This regulation defining "small entity" in the context of broadband PCS auctions has been approved by the SBA.⁷ With respect to 47 GHz license applicants, we propose to use the small entity definition adopted in the Broadband PCS proceeding.

The Commission, however, has not yet determined or proposed how many licenses will be awarded, nor will it know how many licensees will be small businesses until the auction, if required, is held. Even after that, the Commission will not know how many licensees will partition their license areas or disaggregate their spectrum blocks, if partitioning and disaggregation are allowed. In view of our lack of knowledge of the entities which will seek 47 GHz licenses, we therefore assume that, for purposes of our evaluations and conclusions in the IRFA, all of the prospective licensees are small entities, as that term is defined by the SBA or our proposed definitions for the 47 GHz band.

We invite comment on this analysis.

⁴ 15 U.S.C. § 632.

⁵ See 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 5 U.S.C. § 632).

⁶ 15 U.S.C. § 632.

⁷ See Implementation of Section 309(j) of the Communications Act – Competitive Bidding, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5532, 5581-82 (para. 115) (1994).

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

Entities interested in acquiring spectrum in the 47 GHz band will be required to submit license applications and high bidders will be required to apply for their individual licenses. The proposals under consideration in this item also include requiring commercial licensees to make showings that they are in compliance with construction requirements, file applications for license renewals and make certain other filings as required by the Communications Act. We request comment on how these requirements can be modified to reduce the burden on small entities and still meet the objectives of the proceeding.

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

We have reduced burdens wherever possible. To minimize any negative impact, however, we propose certain incentives for small entities which will redound to their benefit. These special provisions include partitioning and spectrum disaggregation. The regulatory burdens we have retained, such as filing applications on appropriate forms, are necessary in order to ensure that the public receives the benefits of innovative new services in a prompt and efficient manner. We will continue to examine alternatives in the future with the objectives of eliminating unnecessary regulations and minimizing any significant economic impact on small entities. We seek comment on significant alternatives commenters believe we should adopt.

F. Federal Rules that May Duplicate, Overlap, or Conflict With the Proposed Rules

None.

Appendix B

Proposed Rules

The Federal Communications Commission proposes that Part 27 of Title 47, Code of Federal Regulations, be amended as follows:

PART 27 — WIRELESS TELECOMMUNICATIONS SERVICE

1. The authority citation for Part 27 continues to read as follows:

Authority: 47 U.S.C. § 154, 301, 302, 303, 307, 309, and 332.

2. Section 27.1 is amended by revising paragraph (b) to read as follows:

§ 27.1 Basis and purpose.

* * * * *

(b) Purpose. This part states the conditions under which various frequency bands are made available and licensed for the provision of WCS.

* * * * *

3. Section 27.2 is revised to read as follows:

§ 27.2 Permissible communications.

(a) Subject to the rules contained herein, any services allocated in § 2.106 of part 2 of this title for non-Government use (column 5) in the frequency bands specified in § 27.5 may be provided by WCS licensees in those bands.

(b) In addition, satellite digital audio radio service (DARS) may be provided using the 2310-2320 and 2345-2360 MHz bands. Satellite DARS service shall be provided in manner consistent with part 25 of this chapter.

4. Section 27.3 is amended by redesignating paragraphs (f), (g), and (h) as (g), (h), and (i) and adding a new paragraph (f) to read as follows:

§ 27.3 Other applicable rule parts.

* * * * *

(f) **Part 20.** This part sets forth the requirements and conditions applicable to commercial mobile radio service providers.

5. Section 27.4 is amended by revising the definition of wireless communications services and by adding new definitions to read as follows:

§ 27.4 Terms and definitions.

* * * * *

Disaggregation. The assignment of discrete portions or "blocks" of spectrum licensed to a geographic licensee or qualifying entity.

* * * * *

High Altitude Platform Station. A station located on an object at an altitude of 20 to 50 km and at a specified, nominal, fixed point relative to the Earth.

* * * * *

Partitioning. The assignment of geographic portions of a licensee's authorized service area along geopolitical or other boundaries.

* * * * *

Wireless Communications Service. A radiocommunication service that encompasses the allocated radio services in § 2.106 of part 2 designated for non-Government use (column 5) for the frequency band in which the station is licensed.

6. In Section 27.5, paragraph (c) is added to read as follows:

§ 27.5 Frequencies.

* * * * *

(c) Five paired channel blocks are available on a Regional Economic Area Grouping basis as follows:

Block V:	47.2-47.3 and 47.7-47.8 GHz
Block W:	47.3-47.4 and 47.8-47.9 GHz
Block X:	47.4-47.5 and 47.9-48.0 GHz
Block Y:	47.5-47.6 and 48.0-48.1 GHz
Block Z:	47.6-47.7 and 48.1-48.2 GHz

7. A new § 27.7 is added to read as follows:

§ 27.7 Permissible communications services.

(a) Authorization for stations will be granted to provide services on a common carrier basis or a non-common carrier basis or on both a common carrier and non-carrier basis in a single authorization.

(b) Stations may render any kind of communications service consistent with the Commission's rules and the regulatory status of the station to provide services on a common carrier or non-common carrier basis.

(c) An applicant or licensee may submit a petition at any time requesting clarification of the regulatory status required to provide a specific communications service.

8. A new § 27.8 is proposed to be added to read as follows:

§ 27.8 Requesting regulatory status.

(a) Initial applications. An applicant will specify if it is requesting authorization to provide services on a common carrier basis, a non-common carrier basis, or on both a common carrier and non-common carrier basis.

(b) Amendment of pending applications.

(1) Any pending application may be amended to:

(i) Change the carrier status requested, or

(ii) Add to the pending request in order to obtain both common carrier and non-common carrier status in a single license.

(2) Amendments to change, or add to, the carrier status in a pending application are minor amendments filed under § 27.313.

(c) Modification of license.

(1) A licensee may modify a license to:

(i) Change the carrier status authorized, or

(ii) Add to the status authorized in order to obtain both common carrier and non-common carrier status in a single license.

(2) Applications to change, or add to, the carrier status in a license are modifications not requiring prior Commission authorization. The licensee must notify the Commission within 30 days of the change. If the change results in the discontinuance, reduction, or impairment of an existing service, the licensee is also governed by § 27.71 of this part.

9. Section 27.11 is amended by revising paragraph (b) to read as follows:

§ 27.11 Initial authorization.

* * * * *

(b) The initial WCS authorizations shall be granted in accordance with § 27.5 of this part.

(1) Authorizations for Blocks A and B will be based on Major Economic Areas (MEAs), as shown in section 27.6. Authorizations for Blocks C and D will be based on Regional Economic Area Groupings (REAGs), as shown in § 27.6 of this part.

(2) Authorizations for Blocks V, W, X, Y, and Z will be based on Regional Economic Area Groupings (REAGS), as shown in § 27.6 of this part.

(3) Applications for individual sites are not required and will not be accepted, except where required for environmental assessments, in accordance with § 27.59 of this part.

10. In § 27.14, new paragraphs (1) and (2) are added to paragraph (a) to read as follows:

§ 27.14 Construction requirements; Criteria for comparative renewal proceedings.

(a) * * *

(1) As examples of "safe-harbors," for a WCS licensee that chooses to offer fixed services or point-to-point services, the construction of four permanent links per one million people in its licensed service area at the 10-year renewal mark would constitute substantial service. For a WCS licensee that chooses to offer mobile services or point-to-multipoint services, a demonstration of coverage to 20 percent of the population of its licensed service area at the 10-year renewal mark would constitute substantial service. For a licensee that chooses to offer a fixed-satellite service, one launched satellite in conjunction with construction of one earth station per licensed service area at the 10-year renewal mark would constitute substantial service.

(2) In addition, the Commission may consider such factors as whether the licensee is offering a specialized or technologically sophisticated service that does not require wide coverage to be of benefit to customers, and whether the licensee's operations serve niche markets or focus on serving populations outside of areas served by other licensees. These safe-harbor examples are intended to provide WCS licensees a degree of certainty as to compliance with the substantial service requirement by the end of the initial license term. Licensees can meet this requirement in other ways, and licensees' showings will be reviewed on a case-by-case basis.

* * * * *

11. Section 27.15 is amended by revising paragraph (b)(4) and adding new paragraph (e) to read as follows:

§ 27.15 Geographic partitioning and spectrum disaggregation.

* * * * *

(b) * * *

(4) Signal levels. For purposes of partitioning and disaggregation, WCS systems must be designed so as not to exceed the signal level specified in § 27.55 of this part at or beyond the licensee's service area boundary, unless any affected adjacent service area licensee has agreed to a different signal level.

* * * * *

(e) Construction Requirements.

(1) Partitioning. Partial assignors and assignees for license partitioning have two options to meet construction requirements. Under the first option, the partitioner and partitionee would each certify that they will independently satisfy the substantial service requirement for their respective partitioned areas. If either licensee failed to meet its substantial service showing requirement, only the non-performing licensee's renewal application would be subject to dismissal. Under the second option, the partitioner certifies that it has met or will meet the substantial service requirement for the entire market. If the partitioner fails to meet the substantial service standard, however, only its renewal application would be subject to forfeiture at renewal.

(2) Disaggregation. Partial assignors and assignees for license disaggregation have two options to meet construction requirements. Under the first option, the disaggregator and disaggregatee would certify that they each will share responsibility for meeting the substantial

service requirement for the geographic service area. If parties choose this option and either party fails to do so, both licenses would be subject to forfeiture at renewal. The second option would allow the parties to agree that either the disaggregator or the disaggregatee would be responsible for meeting the substantial service requirement for the geographic service area. If parties choose this option, and the party responsible for meeting the construction requirement fails to do so, only the license of the nonperforming party would be subject to forfeiture at renewal.

12. Section 27.53 is amended by revising introductory paragraph (a), redesignating paragraph (c) as paragraph (d), and adding a new paragraph (c), to read as follows:

§ 27.53 Emission limits.

(a) For the band 2305-2360 MHz: The power of any emission outside the licensee's bands of operation shall be attenuated below the transmitter power (p) within the licensed bands of operation by the following amounts:

* * * * *

(c) For the 47.2-48.2 GHz band: The peak power of any emission outside the licensee's authorized bands shall be attenuated below the maximum peak spectral density by at least 43 + 10 log (p) dB or 80 dB, whichever is less.

(d) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

13. Section 27.55 is revised to read as follows:

§ 27.55 Field strength limits.

The predicted or measured median field strength at any location at or beyond the border of a WCS service area shall not exceed the following value unless the parties agree to a different field strength. This value applies to both the initially offered MEA and REAG service areas and to partitioned service areas.

For the 2305-2320 MHz and 2345-2360 MHz bands: 47 dBuV/m.

14. Section 27.57 is revised to read as follows:

§ 27.57 International coordination.

Terrestrial WCS operations in the border areas shall be subject to coordination with bordering countries and provide protection to non-U.S. operations in the appropriate frequency bands. In addition, satellite operations in WCS spectrum shall be subject to international satellite coordination procedures.

15. Section 27.58 is amended by revising introductory paragraph (a) to read as follows:

§ 27.58 Interference to MDS/ITFS receivers.

(a) WCS licensees operating in the 2.3 GHz band shall bear full financial obligation to remedy interference to MDS/ITFS block down converters if all of the following conditions are met:

* * * * *

16. A new Section 27.71 is added to read as follows:

§ 27.71 Discontinuance, reduction, or impairment of service

(a) If the service provided by a fixed common carrier licensee is involuntarily discontinued, reduced, or impaired for a period exceeding 48 hours, the licensee must promptly notify the Commission, in writing, as to the reasons for discontinuance, reduction, or impairment of service, including a statement when normal service is to be resumed. When normal service is resumed, the licensee must promptly notify the Commission.

(b) If a fixed common carrier licensee voluntarily discontinues, reduces, or impairs service to a community or part of a community, it must obtain prior authorization as provided under § 63.71 of this chapter. An application will be granted within 30 days after filing if no objections were received.

(c) If a non-common carrier licensee voluntarily discontinues, reduces, or impairs service to a community or part of a community, it must give written notice to the Commission within seven days.

(d) Notifications and requests identified in § 27.71(a)-(c) should be sent to: Federal Communications Commission, Common Carrier Radio Services, 1270 Fairfield Road, Gettysburg, Pennsylvania, 17325.