

credits, except that we did not propose a 35 percent bidding credit for entities having average annual gross revenues of \$3 million or less. We request comment on whether our proposed small business definitions and bidding credits, including this additional credit, are appropriate for the 4.9 GHz band should that band be consolidated with these frequencies.

127. We also seek comment on whether the small business provisions we propose today are sufficient to promote participation by businesses owned by minorities and women, as well as rural telephone companies. To the extent that commenters propose provisions to ensure participation by minority- or women-owned businesses, they should address how such provisions should be crafted to meet the relevant constitutional standards.³¹⁴

D. Additional Satellite Issues

1. International Intercontinental Restriction on Fixed Satellite Service

128. In General Docket 80-739, the Commission added an allocation in the 3600-3700 MHz band for the FSS (space-to-Earth), but adopted footnote US 245 to restrict use of this FSS allocation "to international inter-continental systems subject to a case-by-case electromagnetic compatibility analysis."³¹⁵ The Commission indicated that this restricted allocation was aimed narrowly at meeting future INTELSAT projected requirements.³¹⁶ We did not specifically propose to remove this footnote restriction from the 3650-3700 MHz band in the *Notice and Order*. We believe that deletion of this footnote restriction should be considered for the 3650-3700 MHz band in order to provide for flexible and efficient use of FSS earth station sites. As INTELSAT privatizes, and as commercial providers offer similar services, we do not consider it appropriate to continue what amounts to a spectrum reservation for only one of several competitors. We seek comment on whether deletion or modification of this footnote is desirable.

2. Telemetry, Tracking & Control (TT&C)

129. As noted earlier, we are requesting comment on whether Part 25 of the Commission's rules should be modified to permit TT&C operations in the extended C-bands (3650-3700 MHz and 5850-5925 MHz) for FSS systems that operate outside of the C-band frequencies. Section 25.202(g) of the Commission's rules provides: "Telemetry, tracking and telecommand functions for U.S. domestic satellites shall be conducted at either or both edges of the allocated band(s)."³¹⁷ This rule, particularly the portion requiring that TT&C functions be conducted in the "allocated band(s)," has been followed in the standard C- and Ku- bands, and effectively limits FSS operators to operating TT&C links in the same frequency bands as their FSS operations. Thus a GSO/FSS operator will generally coordinate its TT&C operations with the same set of satellites, at adjacent orbital locations, with which it coordinates its FSS operations. In this respect, the rule serves the purpose of simplifying the coordination process for FSS systems, by limiting the number of potentially affected operators. It also provides an incentive for an

³¹⁴ See *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995); *United States v. Virginia*, 518 U.S. 515 (1996).

³¹⁵ See *Notice and Order*, 14 FCC Rcd at 1297-98 (¶ 3). See also Amendment of Part 2 of the Commission's Rules Regarding Implementation of the Final Acts of the World Administrative Radio Conference, Geneva 1979, in General Docket No. 80-739, Second Report and Order, 49 Federal Register 2357 (Jan. 19, 1984).

³¹⁶ See *Notice and Order*, 14 FCC Rcd at 1297-98 (¶ 3).

³¹⁷ See 47 C.F.R. § 25.202(g).

operator to maximize the efficiency of a system's TT&C operations, and minimize the constraints placed on other satellite operations, since the greatest effect of any inefficiency in TT&C operations is likely to impact services offered by the operator's own satellite.

130. We continue to believe that the basic purpose of Section 25.202(g) is valid. There may be instances, however, in which geographic or bandwidth limitations on an allocation render TT&C operations impracticable in the allocation in which the space station is operating, e.g., transfer orbit operations for a system operating in an ITU Region 2 only allocation. We therefore propose to amend Section 25.202(g) to permit authorization of TT&C operations in the 3650-3700 MHz band for FSS systems that operate outside of the 3650-3700 MHz band, upon a particularized showing of need. TT&C would be primary if conducted at grandfathered FSS sites and secondary at new sites. We note that this may provide greater flexibility for FSS licensees that may have operational requirements that cannot otherwise be met. We specifically seek comment on the circumstances when such TT&C operations should be authorized.

131. We specifically seek comment on the types of showings that would warrant such an authorization. A number of commenters on the TT&C petition identified satellite systems operating at Ka-band frequencies and above as particularly in need of C-band TT&C frequencies, because of the more favorable signal propagation characteristics of C-band, and consequent higher reliability. We seek comment on this issue. Can higher reliability be assured at Ka-band and above through the use of earth station diversity, or other technical methods? Are there particular TT&C operations, such as recovery using an omni-directional spacecraft antenna of a spacecraft of which control has been lost, for which a C-band antenna provides the only sufficiently reliable option? Are there costs associated with providing TT&C through "allocated band(s)" that would potentially offset the increased complexity of coordination, potential interference with adjacent satellite operators, and potential incentives to specify less efficient TT&C operations? Are TT&C costs likely to decrease as more Ka-band and above systems become operational, more Ka-band and above equipment is deployed, and more operational experience is gained with Ka-band and above antennas?

132. We are not proposing any changes to the Table of Allocations to permit TT&C use of the 3650-3700 MHz band by satellite systems having an FSS component. Such uses are permitted under Part 2 of the rules.³¹⁸ We propose to modify the Table of Allocations in Section 2.106 of the Commission's rules to include an allocation for space operations in the 3650-3700 MHz band, and the companion 6425-6525 MHz bands, to be used for TT&C by satellite systems that do not have an FSS component, and thus might otherwise be precluded by our rules from use of this band.

3. Space Station Power Flux Density

133. There are currently no limits in the Commission's rules on the power flux density that a space station operating in the 3650-3700 MHz band may produce, unlike in the adjacent 3700-4200 MHz band. The limit for the 3700-4200 MHz band contained in the Commission's rules,³¹⁹ however, is identical to the limit in the ITU Radio Regulations.³²⁰ The ITU limit applies throughout the 3400-4200

³¹⁸ TT&C is a space operations service. See 47 C.F.R. § 2.1 (definition of space operations service). Space operations functions "will normally be provided within the service in which the space station is operating." *Id.*, note. Thus, a space station that otherwise operates in an FSS allocation may also provide TT&C in an FSS allocation.

³¹⁹ See 47 C.F.R. § 25.208(a).

³²⁰ See ITU Radio Regulation S21.16.

MHz band. We seek comment on whether this limit should be adopted for the 3650-3700 MHz band.

V. PROCEDURAL MATTERS

A. Challenge to Earth Station Application Freeze

134. Some of the commenters allege that our decision to suspend the acceptance of license applications, major amendments, and major modifications is procedurally defective.³²¹ PanAmSat and Wold claim that the suspension of the acceptance of such applications deprives FSS operators of the three basic elements that fundamental fairness requires in administrative proceedings: notice, and opportunity to comment, and reasonable consideration of the viewpoints expressed.³²² We note that in several proceedings the Commission has suspended the acceptance of license applications while it transitions from one set of regulations to new regulations.³²³ The purpose of these suspensions has been to ensure that the goals of the rulemaking proceeding were not compromised and to deter speculative applications.³²⁴ As stated before in other Commission items and as mentioned in the *Notice and Order*, the suspension of acceptance of applications is procedural and not substantive.³²⁵ Therefore, it does not require notice and comment under the Administrative Procedure Act ("APA").³²⁶ Wold's contention that earth station operators are to be foreclosed from competing for licenses is incorrect. Indeed, today's *Report and Order* allows current users to continue to use the spectrum they currently have plus it provides them with a limited opportunity to expand their operations. Globecast asserts that the freeze is a significant policy change and requires "sunshine." The reference to "sunshine" is not clear. Section 1.1203 of our rules prohibit "presentations to decision-makers concerning matters listed on a Sunshine Agenda, whether *ex parte* or not."³²⁷ We followed section 1.1203 when we adopted the *Notice and Order* and followed those procedures for adopting this *Report and Order*. Therefore, Globecast's concerns are unwarranted.

³²¹ See e.g., PanAmSat comments at 4; Globecast comments at 2; Wold reply comments at 4-5.

³²² See PanAmSat comments at 4; Wold reply comments at 4-5.

³²³ See, e.g., *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, Second Report and Order and Second Further Notice of Proposed Rulemaking, 12 FCC Rcd 16949, 17015 (¶ 132) (1997); *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, Notice of Proposed Rule Making, WT Docket No. 96-18, 11 FCC Rcd 3108, 3136 (¶ 139) (1996); *Licensing of General Category Frequencies in the 806-809.750/851-854.750 MHz Bands*, Order, 10 FCC Rcd at 13190 (¶ 3) (1995).

³²⁴ See, e.g., *Implementation of Section 309(j) and 337 of the Communications Act of 1934 as Amended*, WT Docket 99-87, Notice of Proposed Rule Making, 14 FCC Rcd 5206, 5249 (¶ 96) (1999) ("Implementation of 309(j) Order"); *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, WT Docket 96-18, First Report and Order, 11 FCC Rcd 16570, 16581 (¶ 19) (1996) ("Paging Order").

³²⁵ See *Notice and Order*, 14 FCC Rcd at 1305-06 (¶ 13).

³²⁶ See *Paging Order*, 11 FCC Rcd at 16580-81 (¶ 18).

³²⁷ See 47 C.F.R. § 1.1203(a).

B. Final Regulatory Flexibility Analysis

135. As required by the Regulatory Flexibility Act of 1980 ("RFA"),³²⁸ the Final Regulatory Flexibility Analysis for this First Report and Order is contained in Appendix B.

C. Initial Regulatory Flexibility Analysis

136. 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 Second Notice of Proposed Rule Making and is contained in Appendix C. 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 Flexibility Analysis, we ask a number of questions in our IRFA regarding the prevalence of small businesses in the affected industries.

137. Comments must be filed in accordance with the same filing deadlines as comments filed in response to the Second Notice of Proposed Rule Making, but they must have a separate and distinct heading designating them as responses to the IRFA. The Commission's Consumer Information Bureau, Reference Information Center, will send a copy of this Report and Order and Second Notice of Proposed Rule Making, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

D. Paperwork Reduction Analysis

138. This First Report and Order and Second Notice of Proposed Rule Making 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 Report and Order and Second Notice of Proposed Rule Making, as required by the Paperwork Reduction Act of 1995.³²⁹ Public and agency comments are due 60 days from the date of publication of this Second Notice in the Federal Register; OMB comments are due 120 days from the date of publication of this Second 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.

139. Written comments by the public on the proposed and/or modified information collections are due 60 days after the date of publication in the Federal Register. Written comments must be submitted by the OMB on the proposed and/or modified information collections on or before 120 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

³²⁸ See 5 U.S.C. § 603 *et seq.*

³²⁹ See Pub. L. No. 104-13.

Boley, Federal Communications Commission, Room 1-C804, 445 Twelfth Street, S.W., Washington, D.C. 20554, or via the Internet to jboley@fcc.gov, and to Ed Springer, OMB Desk Officer, Room 10236 New Executive Office Building, 725 Seventeenth Street, N. W., Washington, D.C. 20503, or via the Internet to Edward.Springer@omb.eop.gov.

E. *Ex Parte* Presentations

140. 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.³³⁰

F. Pleading Dates

141. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's rules,³³¹ interested parties may file comments on or before **[30 days from publication in the Federal Register]** and reply comments on or before **[60 days from publication in the Federal Register]** Comments and reply comments should be filed in ET Docket No. 98-237. 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, Room TW-A325, 445 Twelfth Street, S.W., Washington, D.C. 20554, with a copy to Eli Johnson, Policy Division, Wireless Telecommunications Bureau, 445 Twelfth Street, S.W., Washington, D.C. 20554.

142. Comments may also be filed using the Commission's Electronic Comment Filing System (ECFS).³³² 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.

143. Comments and reply comments will be available for public inspection during regular business hours at the FCC Reference Information Center, Room CY-A257, at the Federal Communications Commission, 445 Twelfth Street, S.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. 20037, (202) 857-3800.

G. Further Information

144. For further information concerning the First Report and Order, contact Rodney Conway via phone at (202) 418-2904, via e-mail at rconway@fcc.gov, via TTY (202) 418-2989, Office of

³³⁰ See generally 47 C.F.R. §§ 1.1202, 1.1203, 1.1206(a).

³³¹ See 47 C.F.R. §§ 1.415, 1.419.

³³² See Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24,121 (1998).

Engineering and Technology, Federal Communications Commission, Washington D.C. 20554. For further information concerning the Second Notice of Proposed Rule Making, contact Eli Johnson via phone at (202) 418-1310, via e-mail at ejohnson@fcc.gov, via TTY at (202) 418-7233, Wireless Telecommunications Bureau, Federal Communications Commission, Washington, D.C. 20554.

VI. ORDERING CLAUSES

145. IT IS ORDERED, that Parts 2 and 90 of the Commission's rules and regulations are amended as specified in Appendix D [effective ninety days after publication in the Federal Register]. This action is taken pursuant to Sections 4, 4(i), 157, 303, 303(g), 303(r), 307, and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154, 154(i), 157, 303, 303(g), 303(r), 307, and 332(c)(7).

146. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this FIRST REPORT AND ORDER including the Final Regulatory Flexibility Analysis and SECOND NOTICE OF PROPOSED RULE MAKING, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with paragraph 603(a) of the Regulatory Flexibility Act, Pub Law No. 96-354, 94 Stat. 1164, 5 U.S.C. § 601, *et seq.* (1981).

147. IT IS FURTHER ORDERED that the petition for rule making filed by Comm, Inc., EchoStar Satellite Corporation, GE American Communications, Inc., Hughes Communications Galaxy, Inc., KaStar Satellite Communications Corp., Lockheed Martin Corporation, Orion Network Systems, Inc., PanAmSat Licensee Corp., and VisionStar, Inc., entitled "Amendment of Parts 2 and 25 of the Commission's rules to Designate Extended C-Band Spectrum for TT&C Functions of GSO FSS Systems Operating in Bands Above Ku-band" in RM-9411 IS HEREBY DENIED, in part, with respect to the request for the designation of 10 MHz of spectrum in the 3650-3700 MHz band to be used exclusively for TT&C operations and IS DISMISSED WITHOUT PREJUDICE, in part, concerning the request to allow FSS licensees with systems that operate outside the 3650-3700 MHz band to use the band for TT&C operations.

148. IT IS FURTHER ORDERED that the petition for rule making by Mountain Telecommunications Inc., and Saddleback Communications Company entitled "Petition for Allocation of Radio Spectrum in the 3.4-3.7 GHz Band to Allow Carriers to Improve Deployment and Reduce Costs Through the Provision of Fixed Wireless Access" IS HEREBY DENIED.

149. IT IS FURTHER ORDERED that NOTICE IS HEREBY GIVEN to any FSS earth station licensee with operations in the 3650-3700 MHz band that may have been omitted from Appendix A of the *Memorandum Opinion and Order* in this proceeding must contact Sylvia Lam, via phone at (202) 418-0742, or via e-mail slam@fcc.gov, International Bureau, in order to ensure that the licensed earth station receives grandfathering protections.

150. IT IS FURTHER ORDERED that, pursuant to Sections 4, 4(i), 157, 303, 303(g), 303(r), 307 and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154, 154(i), 157, 303, 303(g), 303(r), 307, and 332(c)(7) the SECOND NOTICE OF PROPOSED RULE MAKING, is hereby ADOPTED.

FEDERAL COMMUNICATIONS COMMISSION


Magalie Roman Salas
Secretary

APPENDIX A: RESPONDENTS**LIST OF COMMENTERS**

1. Airspan Communications Corporation ("Airspan")
2. Blooston, Mordkofsky, Jackson & Dickens on behalf of: CommNet Cellular, Inc., Kerville Telephone Company, Lincoln County Telephone System, Inc., Minnesota Southern Cellular Telephone Company, Penasco Valley Telephone Cooperative Inc., Ringgold Telephone Company, Sully Buttes Telephone Cooperative Inc., 3 Rivers Telephone Cooperative Inc. ("Rural Carriers")
3. Cheyenne River Sioux Telephone Authority ("CRST")
4. COMSAT Corporation ("COMSAT")
5. Comsearch
6. EchoStar Communications Corporation ("EchoStar")
7. GE American Communications, Inc. ("GE Americom")
8. GlobeCast North America Incorporated ("GlobeCast")
9. Hughes Communications, Inc. ("HCI")
10. InnoWave Tadiran Telecommunications Wireless Systems Ltd. ("InnoWave")
11. Loral Space & Communications Ltd. ("Loral")
12. Lucent Technologies ("Lucent")
13. Motorola
14. National Telephone Cooperative Association ("NTCA")
15. PanAmSat Corporation ("PanAmSat")
16. Petroleum Communications, Inc. ("PetroCom")
17. The Rural Telecommunications Group ("RTG")
18. Satellite Industry Association ("SIA")
19. SBC Communications Inc. ("SBC")
20. Sprint Corporation ("Sprint")
21. Telephone and Data Systems, Inc. ("TDS") on behalf of its subsidiaries: Aerial Communications, Inc., TDS Telecommunications Corporation, and United States Cellular Corporation
22. SR Telecom Inc. ("SR Telecom")
23. TRANSCOMM, Inc. ("TRANSCOMM")
24. TRW, Inc ("TRW")
25. Lockheed Martin Corporation ("Lockheed Martin")
26. Northern Telecom Inc. ("Nortel Networks")
27. New Skies Satellites N.V. ("New Skies")

LIST OF REPLY COMMENTERS

1. AT&T Corp. ("AT&T")
2. COMSAT Corporation ("COMSAT")
3. Comsearch
4. GTE Service Corporation ("GTE") on behalf of its affiliates: GTE Alaska, Incorporated, GTE Arkansas Incorporated, GTE California Incorporated, GTE Florida Incorporated, GTE Hawaiian Telephone Company Incorporated, The Micronesian Telecommunications Corporation, GTE Midwest Incorporated, GTE North Incorporated, GTE Northwest Incorporated, GTE South Incorporated, GTE Southwest Incorporated, Contel of Minnesota, Inc., GTE West Coast Incorporated, Contel of the South, Inc., GTE Communications Corporation and GTE Wireless Incorporated.
5. Hughes Communications, Inc. ("HCI")
6. ICG Satellite Services, Inc. ("ICG")
7. Lockheed Martin Corporation ("Lockheed Martin")
8. PanAmSat Corporation ("PanAmSat")

-
9. Blooston, Mordkofsky, Jackson & Dickens on behalf of: CommNet Cellular, Inc., Kerville Telephone Company, Lincoln County Telephone System, Inc., Minnesota Southern Cellular Telephone Company, Penasco Valley Telephone Cooperative Inc., Ringgold Telephone Company, Sully Buttes Telephone Cooperative Inc., 3 Rivers Telephone Cooperative Inc. ("Rural Carriers")
 10. Sprint Corporation ("Sprint")
 11. Telephone and Data Systems, Inc. ("TDS") on behalf of its subsidiaries: Aerial Communications, Inc., TDS Telecommunications Corporation, and United States Cellular Corporation
 12. Western Wireless Corporation ("Western Wireless")
 13. Wold International, Inc. ("Wold")
 14. New Skies Satellites N.V. ("New Skies")
 15. MCI WorldCom, Inc. ("MCI WorldCom")
 16. Organization For The Promotion And Advancement Of Small Telecommunications Companies ("OPASTCO")
 17. GE American Communications, Inc. (GE Americom")
 18. ImpSat USA

APPENDIX B: FINAL REGULATORY FLEXIBILITY ANALYSIS FOR REPORT AND ORDER

As required by the Regulatory Flexibility Act (RFA),³³³ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the *Notice of Proposed Rule Making and Order* ("Notice and Order") in ET Docket 98-237.³³⁴ The Commission sought written public comments on the proposals in the *Notice and Order*, including the IRFA. The Final Regulatory Flexibility Analysis ("FRFA") in this *First Report and Order and Second Notice of Proposed Rule Making* conforms to the RFA.³³⁵

A. Need for and Objective of this Report and Order.

These rules allocate the 3650-3700 MHz band to the fixed, mobile (base stations only), and grandfathered fixed satellite services on a co-primary basis and for non-grandfathered fixed satellite service earth station operations on a secondary basis. These actions are taken in order to make this transfer spectrum available for commercial services, including those of any small businesses. The adoption of this First Report and Order and Second Notice of Proposed Rule Making will provide additional spectrum to be used in meeting the growing demand for fixed, mobile (base station only) and fixed satellite services among all sizes of providers.

B. Legal Basis for Adopted Rules.

The adopted rule changes are authorized pursuant to Sections 4, 4(i), 157, 303, 303(g), 303(r), 307, and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154, 154(i), 157, 303, 303(g), 303(r), 307, and 332(c)(7).

C. Summary of Significant Issues raised by Public Comments in Response to the IRFA.

No comments were filed in response to the IRFA that was contained in the *Notice and Order* in this proceeding.

D. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply.

For purposes of this First Report and Order, the RFA defines a "small business" to be the same as a "small business concern" under the Small Business Act, 15 U.S.C. § 632, unless the Commission has developed one or more definitions that are appropriate to its activities.³³⁶ 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").³³⁷

³³³ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 et seq., has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

³³⁴ See 14 FCC Rcd 1295 (1999).

³³⁵ See 5 U.S.C. § 604.

³³⁶ See 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 5 U.S.C. § 632).

³³⁷ See 15 U.S.C. § 632.

A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."³³⁸ Nationwide, as of 1992, there were approximately 275,801 small organizations.³³⁹ The definition of "small governmental jurisdiction" is one with populations of fewer than 50,000.³⁴⁰ There are 85,006 governmental jurisdictions in the nation.³⁴¹ This number includes such entities as states, counties, cities, utility districts and school districts. There are no figures available on what portion of this number has populations of fewer than 50,000. However, this number includes 38,978 counties, cities and towns, and of those, 37,556, or 96 percent, have populations of fewer than 50,000.³⁴² The Census Bureau estimates that this ratio is approximately accurate for all government entities. Thus, of the 85,006 governmental entities, we estimate that 96 percent, or about 81,600, are small entities that may be affected by our rules. Nationwide, there are 4.44 million small business firms, according to SBA reporting data.³⁴³

The Commission has not developed a definition of small entities applicable to fixed satellite service licensees. Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to Communications Services, Not Elsewhere Classified. This definition provides that a small entity is one with no more than 11.0 million in annual receipts.³⁴⁴ According to Census Bureau data, there are 848 firms that fall under the category of Communications Services, Not Elsewhere Classified. Of those, approximately 775 reported annual receipts of 11 million or less and qualify as small entities.³⁴⁵

As described, the designations we hereby adopt will permit wireless services, as broadly defined to include fixed and mobile base station operations. Neither the Commission nor the SBA has developed a definition of small entities applicable to wireless services licensees. Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to radiotelephone (wireless) companies.

The rules adopted by the First Report and Order will affect applicants who wish to provide fixed, mobile (base stations only) and/or fixed satellite services in the 3650-3700 MHz band. Pursuant to 47 C.F.R. § 24.702(b) the Commission has defined "small entity" for Blocks C and F broadband licensees as firms that had average gross revenues of less than \$40 million dollars in the three previous calendar years. This Commission regulation defining "small entity" in the context of broadband PCS auctions has been

³³⁸ *Id.* § 601(4).

³³⁹ Department of Commerce, U.S. Bureau of the Census, 1992 Economic Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

³⁴⁰ 5 U.S.C. § 601(5).

³⁴¹ 1992 Census of Governments, U.S. Bureau of the Census, U.S. Department of Commerce.

³⁴² *Id.*

³⁴³ See 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to the Office of Advocacy of the U.S. Small Business Administration).

³⁴⁴ See 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4899.

³⁴⁵ See U.S. Bureau of the Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications, and Utilities, UC92-S-1, Subject Series, Establishment and Firm Size, Table 2D, Employment Size of Firms, 1992, SIC Code 4899 (issued May 1995).

approved by the SBA.³⁴⁶ With respect to the 3650-3700 MHz license applicants, we propose to use the small entity definition adopted in the Broadband PCS proceeding.

The Commission 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 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 which may result in additional small entities. In view of our lack of knowledge of the entities which will seek licenses in the 3650-3700 MHz band, we will assume that, for the purposes of our evaluations and conclusions in the FRFA, all of the prospective licensees are small entities, as that term is defined by the SBA or our proposed definitions for the 3650-3700 MHz band. We invite comment on this analysis.

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

The rules adopted in the First Report and Order allocate the 3650-3700 MHz band to the fixed, mobile (base station operation, and grandfathered fixed satellite services on a co-primary basis and for non-grandfathered fixed satellite service earth station operations on a secondary basis. These adopted rules do not require any additional reporting, recordkeeping or other compliance requirements. Rules that may apply to the auctioning and licensing of these operations or other operating requirements will be addressed in the Second Notice of Proposed Rule Making in this proceeding and any reporting, recordkeeping and other compliance requirements will be addressed then.

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

No petition for rule making was filed to initiate this proceeding and there are no comments in this proceeding that suggest alternatives to the adopted allocation. We requested comment on alternatives that might minimize the amount of economic impact on small entities and no alternatives were offered. The allocation adopted in this First Report and Order represents the most efficient and least restrictive method to accomplish the Commission's policies and objectives.

G. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules.

None.

H. Report to Congress.

The Commission will send a copy of the First Report and Order, including this FRFA, in a report to be sent to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996, see 5 U.S.C. § 801(a)(1)(A). In addition, the Commission will send a copy of the First Report and Order, including FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the First Report and Order and FRFA (or summaries thereof) will also be published in the Federal Register. See 5 U.S.C. § 604(b).

³⁴⁶ See *Implementation of Section 309(j) of the Communications Act, Competitive Bidding*, PP Docket 93-253, Fifth Report and Order, 9 FCC Rcd 5532, 5581-82 (¶ 115)(1994).

APPENDIX C: INITIAL REGULATORY FLEXIBILITY ANALYSIS FOR SECOND NOTICE OF PROPOSED RULE MAKING

As required by the Regulatory Flexibility Act ("RFA"),³⁴⁷ the Commission has prepared this present Initial Regulatory Flexibility Analysis ("IRFA") of the possible significant economic impact on small entities by the policies and rules proposed in the Second Notice of Proposed Rulemaking ("*Second Notice*"), ET Docket No. 98-237, and WT Docket No. 00-32. 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 *Second Notice* as provided above in paragraph 141. The Commission will send a copy of the *Second Notice*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.³⁴⁸ In addition, the *Second Notice* and IRFA (or summaries thereof) will be published in the Federal Register.³⁴⁹

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

In this *Second Notice*, we propose licensing, service, operating, and competitive bidding rules for fixed and mobile services licenses in the 3650-3700 MHz band. The *Second Notice* also seeks comment on applying similar rules to the 4.9 GHz band, if the Commission determines that the public interest would be served by licensing these two bands at the same time. These actions are intended to facilitate the provision of a broad range of services, including traditional voice telephony and new broadband, high-speed, data and video services. The Commission believes this spectrum may be used to foster the introduction of such services to rural areas of the United States and develop new and more effective competition to existing wireline local exchange carriers by providing for an economical means to offer competitive "local loop" or "last-mile" facilities.

B. Legal Basis for Proposed Rules

The proposed action is authorized under Sections 4, 4(i), 157, 303, 303(g), 303(r), 307, and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154, 154(i), 157, 303, 303(g), 303(r), 307, and 332(c)(7).

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

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.³⁵⁰ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under Section 3 of the Small Business Act, unless the Commission has

³⁴⁷ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601 *et. seq.*, 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).

³⁴⁸ 5 U.S.C. § 603(a).

³⁴⁹ See *id.*

³⁵⁰ 5 U.S.C. § 603(b)(3).

developed one or more definitions that are appropriate for its activities.³⁵¹ 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) satisfies any additional criteria established by the Small Business Administration (SBA).³⁵²

A small organization is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”³⁵³ Nationwide, as of 1992, there were approximately 275,801 small organizations.³⁵⁴ The definition of “small governmental jurisdiction” is one with populations of fewer than 50,000.³⁵⁵ There are 85,006 governmental jurisdictions in the nation.³⁵⁶ This number includes such entities as states, counties, cities, utility districts and school districts. There are no figures available on what portion of this number has populations of fewer than 50,000. However, this number includes 38,978 counties, cities and towns, and of those, 37,556, or 96 percent, have populations of fewer than 50,000.³⁵⁷ The Census Bureau estimates that this ratio is approximately accurate for all government entities. Thus, of the 85,006 governmental entities, we estimate that 96 percent, or about 81,600, are small entities that may be affected by our rules. Nationwide, there are 4.44 million small business firms, according to SBA reporting data.³⁵⁸

The Commission has not developed a definition of small entities applicable to fixed satellite service licensees. Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to Communications Services, Not Elsewhere Classified. This definition provides that a small entity is one with no more than \$11.0 million in annual receipts.³⁵⁹ According to Census Bureau data, there are 848 firms that fall under the category of Communications Services, Not Elsewhere Classified. Of those, approximately 775 reported annual receipts of \$11 million or less and qualify as small entities.³⁶⁰

Because we are substituting the 3650-3700 MHz band for 15 megahertz of spectrum in the 1990-2110 MHz band, we must assign licenses for this spectrum by competitive bidding to satisfy the requirements

³⁵¹ *Id.* § 601(3).

³⁵² *Id.* § 632.

³⁵³ *Id.* § 601(4).

³⁵⁴ Department of Commerce, U.S. Bureau of the Census, 1992 Economic Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

³⁵⁵ 5 U.S.C. § 601(5).

³⁵⁶ 1992 Census of Governments, U.S. Bureau of the Census, U.S. Department of Commerce.

³⁵⁷ *Id.*

³⁵⁸ *See* 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to the Office of Advocacy of the U.S. Small Business Administration).

³⁵⁹ *See* 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4899.

³⁶⁰ *See* U.S. Bureau of the Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications, and Utilities, UC92-S-1, Subject Series, Establishment and Firm Size, Table 2D, Employment Size of Firms, 1992, SIC Code 4899 (issued May 1995).

of the Balanced Budget Act of 1997.³⁶¹ The Commission has not yet determined how many licenses will be awarded. Moreover, the Commission does not know how many licensees will partition their license areas or disaggregate their spectrum blocks, if partitioning and disaggregation are allowed. We therefore assume that, for purposes of our evaluations and conclusions in the IRFA, all prospective licensees are small entities, as that term is defined by the SBA or our proposed small business definitions for terrestrial fixed and mobile services in the 3650-3700 MHz band, which are discussed below in Section E.

We invite comment on this analysis.

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

Applicants for licenses to provide terrestrial fixed and mobile services in the 3650-3700 MHz band will be required to submit short-form applications using FCC Form 175. In addition, winning bidders must submit long-form license applications through the Universal Licensing System using FCC Form 601, and other appropriate forms. We invite comment on how these filing requirements can be modified to reduce the burden on small entities.

As discussed in paragraph 45 of the *Second Notice*, all services, other than fixed satellite service earth stations, in the 3650-3700 MHz band would be governed by Part 27 of the Commission's Rules, and, in certain instances, as discussed in paragraph 46, Part 20 if the proposals are adopted. The proposals under consideration in this item include requiring commercial licensees to make showings that they are in compliance with construction requirements,³⁶² file applications for license renewals³⁶³ and make certain other filings as required by the Communications Act.³⁶⁴ 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

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.³⁶⁵

The *Second Notice* proposes the following small business definitions for bidders in auctions of licenses in the 3650-3700 MHz band: an "entrepreneur" would be defined as an entity with average annual gross revenues for the three preceding years not exceeding \$40 million, a "small business" would be defined as an entity with average annual gross revenues for the three preceding years not exceeding

³⁶¹ See *The Balanced Budget Act of 1997*, Section 3002(c)(4), Pub. L. 105-33, 111 Stat. 251-258 (1997) ("BBA"). See also NTIA Special Publication 98-39.

³⁶² See ¶¶ 82-88, *supra*.

³⁶³ See ¶¶ 72-74, *supra*.

³⁶⁴ See ¶¶ 87-88, *supra*.

³⁶⁵ See 5 U.S.C. § 603(c).

\$15 million, and a “very small business” would be defined as an entity with average annual gross revenues for the three preceding years not exceeding \$3 million. These definitions are consistent with the definitions the Commission applied to the 2.3 GHz WCS, but include an additional third category of entities with average annual gross revenues for the three preceding years not exceeding \$3 million. In developing these definitions, we considered the alternative of using only two small business definitions, as we have done in the 2.3 GHz WCS, 39 GHz, and broadband PCS contexts, among others. Here, however, we believe that an additional third category of small businesses may be appropriate because the deployment of fixed wireless equipment in nearby spectrum bands suggests that entry costs may be lower than was the case for the 2.3 GHz WCS when it was licensed in 1997. Thus, very small businesses may now be better able to take advantage of bidding credits to acquire licenses and provide communications services.

As indicated in paragraphs 50-53, the Commission, while proposing a requirement that fixed and mobile services applicants identify whether or not they seek to provide common carrier services, also proposes to allow these applicants to request common carrier status as well as non-common carrier status for authorization in a single license, rather than require these applicants to choose between common carrier and non-common carrier services. The Commission also proposes that fixed and mobile applicants and licensees in the 3650-3700 MHz band not be required to describe their proposed services, but be required to indicate a regulatory status based on any services they choose to provide. As detailed in paragraphs 54-56, the Commission favors this type of flexible approach for regulating the 3650-3700 MHz for a variety of reasons. The Commission, however, particularly seeks comment on the effect of this flexible approach on possible investment in communications services and systems and more generally on technology development.

As discussed in paragraphs 57-63, the Commission proposes that there be no restrictions on eligibility for fixed and mobile services licensees in the 3650-3700 MHz and 4.9 GHz bands other than the alien ownership restrictions set forth in Section 310 of the Communications Act. In order to supervise effectively the compliance of these licensees with regard to our alien ownership restrictions, we propose that both common carrier and non-common carrier licensees in the 3650-3700 MHz band provide the alien ownership information requested in FCC Form 601, as well as amendments to FCC Form 602 to reflect any changes in foreign ownership information. This proposed enforcement is a mutual benefit to all licensees and a minimal reporting burden.

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.³⁶⁶ These provisions will allow smaller entities to overcome entry barriers. In addition, we seek comment on whether it would be appropriate to license the 3650-3700 MHz band for fixed and mobile services using smaller geographical licensing areas. The use of smaller licensing areas could benefit small entities by reducing costs and build-out expenses. We have also sought comment on different approaches to minimizing the burdens of interference management.³⁶⁷

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.

³⁶⁶ See ¶¶ 75-80, *supra*.

³⁶⁷ See ¶¶ 93-116, *supra*.

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

None.

APPENDIX D: FINAL RULES

Parts 2 and 90 of title 47 of the Code of Federal Regulations are amended as follows:

PART 2 – FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

1. The authority citation for Part 2 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

2. Section 2.106, the Table of Frequency Allocations, is amended as follows:
 - a. Page 54 is revised.
 - b. Footnote US110 is revised and footnotes US348 and US349 are added.
 - c. Footnotes NG169 and NG170 are added.
 - d. Footnotes G59 and G110 are revised.

The revisions and additions read as follows:

§ 2.106 Table of Frequency Allocations.

* * * * *

2900-3100 RADIONAVIGATION S5.426 Radiolocation		2900-3100 MARITIME RADIONAVIGATION Radiolocation G56	2900-3100 MARITIME RADIONAVIGATION Radiolocation US44	Maritime (80) Private Land Mobile (90)
S5.425 S5.427		S5.427 US44 US316	S5.5427 US316	
3100-3300 RADIOLOCATION Earth exploration-satellite (active) Space research (active)		3100-3300 RADIOLOCATION S5.333 US110 G59	3100-3300 Radiolocation S5.333 US110	Private Land Mobile (90)
S5.149 S5.428		S5.149	S5.149	
3300-3400 RADIOLOCATION	3300-3400 RADIOLOCATION Amateur Fixed Mobile	3300-3400 RADIOLOCATION Amateur	3300-3500 RADIOLOCATION US108 G31	Private Land Mobile (90) Amateur (97)
S5.149 S5.429 S5.430	S5.149 S5.430	S5.149 S5.429		
3400-3600 FIXED FIXED-SATELLITE (space-to-Earth) Mobile Radiolocation	3400-3500 FIXED FIXED-SATELLITE (space-to-Earth) Amateur Mobile Radiolocation S5.433			
	S5.282 S5.432	S5.149	S5.149 S5.282	
S5.431	3500-3700 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile Radiolocation S5.433	3500-3650 RADIOLOCATION US110 G59 AERONAUTICAL RADIONAVIGATION (ground-based) G110 US245	3500-3600 Radiolocation US110	Private Land Mobile (90)
3600-4200 FIXED FIXED-SATELLITE (space-to-Earth) Mobile		3650-3700	3600-3650 FIXED-SATELLITE (space-to-Earth) US245 Radiolocation US110	
			3650-3700 FIXED FIXED-SATELLITE (space-to-Earth) NG169 MOBILE except aeronautical mobile NG170	
	S5.435	US245 US348 US349	US245 US348 US349	
	See next page for 3700-4200 MHz	See next page for 3700-4200 MHz	See next page for 3700-4200 MHz	See next page for 3700-4200 MHz

* * * * *

UNITED STATES (US) FOOTNOTES

* * * * *

US110 In the bands 3100-3300 MHz, 3500-3650 MHz, 5250-5350 MHz, 8500-9000 MHz, 9200-9300 MHz, 9500-10000 MHz, 13.4-14.0 GHz, 15.7-17.3 GHz, 24.05-24.25 GHz and 33.4-36.0 GHz, the non-Government radiolocation service shall be secondary to the Government radiolocation service and to airborne doppler radars at 8800 MHz, and shall provide protection to airport surface detection equipment (ASDE) operating between 15.7-16.2 GHz.

* * * * *

US348 The band 3650-3700 MHz is also allocated to the Government radiolocation service on a primary basis at the following sites: St. Inigoes, MD (38° 10' N, 76° 23' W); Pascagoula, MS (30° 22' N, 88° 29' W); and Pensacola, FL (30° 21' 28" N, 87° 16' 26" W). All fixed and fixed satellite operations within 80 kilometers of these sites shall be coordinated through the Frequency Assignment Subcommittee of the Interdepartmental Radio Advisory Committee on a case-by-case basis.

US349 The band 3650-3700 MHz is also allocated to the Government radiolocation service on a non-interference basis for use by ship stations located at least 44 nautical miles in off-shore ocean areas on the condition that harmful interference is not caused to non-Government operations.

* * * * *

NON-FEDERAL GOVERNMENT (NG) FOOTNOTES

* * * * *

NG169 After December 1, 2000, operations on a primary basis by the fixed-satellite service (space-to-Earth) in the band 3650-3700 MHz shall be limited to grandfathered earth stations. All other fixed-satellite service earth station operations in the band 3650-3700 MHz shall be on a secondary basis. Grandfathered earth stations are those authorized prior to December 1, 2000, or granted as a result of an application filed prior to December 1, 2000, and constructed within 12 months of initial authorization. License applications for primary operations for new earth stations, major amendments to pending earth station applications, or applications for major modifications to earth station facilities filed on or after December 18, 1998, and prior to December 1, 2000, shall not be accepted unless the proposed facilities are in the vicinity (*i.e.* within 10 miles) of an authorized primary earth station operating in the band 3650-3700 MHz. License applications for primary operations by new earth stations, major amendments to pending earth station applications, and applications for major modifications to earth station facilities, filed after December 1, 2000, shall not be accepted, except for changes in polarization, antenna orientation or ownership of a grandfathered earth station.

NG170 In the band 3650-3700 MHz, the mobile except aeronautical mobile service is limited to base station operations. These base stations are subject to the same coordination procedures as fixed service operations in the band 3650-3700 MHz.

* * * * *

FEDERAL GOVERNMENT (G) FOOTNOTES

* * * * *

G59 In the bands 902-928 MHz, 3100-3300 MHz, 3500-3650 MHz, 5250-5350 MHz, 8500-9000 MHz, 9200-9300 MHz, 13.4-14.0 GHz, 15.7-17.7 GHz and 24.05-24.25 GHz, all Government non-military radiolocation shall be secondary to military radiolocation, except in the sub-band 15.7-16.2 GHz airport surface detection equipment (ASDE) is permitted on a co-equal basis subject to coordination with the military departments.

* * * * *

G110 Government ground-based stations in the aeronautical radionavigation service may be authorized between 3500-3650 MHz when accommodation in the band 2700-2900 MHz is not technically and/or economically feasible.

* * * * *

PART 90 -- PRIVATE LAND MOBILE RADIO SERVICES

3. The authority citation for Part 90 continues to read as follows:

AUTHORITY: Secs. 4(i), 11, 303(g), 303(r) and 332(c)(7) of the Communications Act of 1934 as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), and 332(c)(7), unless otherwise noted.

4. Section 90.103(b) is amended by replacing the table entry 3500-3700 under the heading "megahertz" with the following entry:

§ 90.103 Radiolocation Service

* * * * *

3500-3650| do| 12

* * * * *

APPENDIX E: PROPOSED RULES

For those reasons discussed in the accompanying Second Notice of Proposed Rulemaking, parts 2, 25 and 27 of Title 47 of the Code of Federal Regulations are proposed to be amended as follows:

PART 2 – FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

1. The authority citation for Part 2 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 302, 303, 307, 336, and 337, unless otherwise noted.

2. Section 2.106, the Table of Frequency Allocations, is amended by adding the following non-Government footnote:

NGXXX Fixed-satellite service systems that operate primarily outside the 3650-3700 MHz band may be authorized to perform space operations, such as, telemetry, tracking and telecommand operations in the band 3650-3700 MHz, provided the requirement in §25.202(g)(1) of this chapter is satisfied.

PART 25 – SATELLITE COMMUNICATIONS

3. The authority citation for Part 25 continues to read as follows:

AUTHORITY: 47 U.S.C. 701-744. Interprets or applies sec. 303, 47 U.S.C. 303. 47 U.S.C. sections 154, 301, 302, 303, 307, 309 and 322, unless otherwise noted.

4. Section 25.202 is modified in paragraph (g) by adding a new paragraph (g)(1) to read as follows:

§ 25.202 Frequencies, frequency tolerance and emission limitations.

* * * * *

(g) * * * * *

(1) Telemetry, tracking and telecommand functions for satellite service systems operating outside of the band 3650-3700 MHz may be authorized on a secondary basis in the 3650-3700 MHz band upon a particularized showing of need.

PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

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

AUTHORITY: 47 U.S.C. 154, 301, 302, 303, 307, 309, 332, 336, and 337, unless otherwise noted.

6. Section 27.1 is modified by adding a new paragraph (b)(3) to read as follows:

§ 27.1 Basis and purpose.

* * * * *

(b) * * * * *

(3) 3650-3700 MHz band.

* * * * *

7. Section 27.4 is modified by adding the following definition

Grandfathered fixed satellite service earth station. An earth station in the 3650-3700 MHz band is an earth station that is authorized prior to December 1, 2000, or granted as a result of an application filed prior to December 1, 2000.

8. Section 27.5 is modified by adding a new paragraph (c) to read as follows:

§ 27.5 Frequencies.

* * * * *

(c) 3650-3700 MHz band. The 3650-3700 MHz band is available for licensing pursuant to this part.

9. Section 27.14 is modified by redesignating paragraph (d) as paragraph (e) and adding a new paragraph (d) to read as follows:

§ 27.14 Construction requirements; criteria for comparative renewal proceedings.

* * * * *

(d) 3650-3700 MHz band.

(1) For a WCS licensee that offers fixed, point-to-point service, the construction of four permanent links per one million people in its licensed service area within the prescribed license term set forth in § 27.13 of this part would constitute substantial service.

(2) For a WCS licensee that offers fixed, point-to-multipoint service, a demonstration of coverage of 20 percent of the population of its licensed service area within the prescribed license term set forth in § 27.13 of this part would constitute substantial service.

(3) For a licensee that offers fixed satellite service, the construction of one earth station per licensed service area within the prescribed license term set forth in § 27.13 of this part would constitute substantial service.

* * * * *

10. Section 27.50 is modified by redesignating paragraph (c) as paragraph (d) and adding a new paragraph (c) to read as follows:

§ 27.50 Power limits.

* * * * *

(c) The following power and antenna height limits apply to base and fixed stations operating in the 3650-3700 MHz band: Base and fixed stations must not exceed an effective radiated power of 1640 watts and

an antenna height of 300 m height above average terrain, or its equivalent.

11. Section 27.53 is modified by redesignating paragraph (f) as paragraph (g) and adding a new paragraph (f) to read as follows:

§ 27.53 Emission limits.

* * * * *

(f) Base and fixed service operations in the 3650-3700 MHz band are subject to the emission limits set forth in § 101.111 of this chapter.

* * * * *

12. Section 27.55 is modified by adding a new paragraph (c) to read as follows:

§ 27.55 Field strength limits.

* * * * *

(c) 3650-3700 MHz band: 54 dB μ V/m

13. Section 27.57 is revised to read as follows:

§ 27.57 International coordination.

WCS licensees shall comply with the appropriate coordination agreements between the United States and Canada and the United States and Mexico concerning cross-border sharing and use of WCS bands. 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.

14. Section 27.58 is revised by inserting introductory text before paragraph (a) to read as follows:

§ 27.58 Interference to MDS/ITFS receivers.

The following rules concerning interference to Multipoint Distribution Service ("MDS") and Instructional Television Fixed Service ("ITFS") receivers apply only to WCS licensees in the 2305-2320 and 2345-2360 MHz bands.

* * * * *

15. Section 27.61 is added to read as follows.

§ 27.61 FS/FSS Coordination Procedure.

Base and fixed service transmitters in the 3650-3700 MHz band that are located within 200 kilometers of

a grandfathered fixed satellite service earth station must be coordinated prior to construction to reduce the potential for interference. The fixed station licensee must use the coordination procedures specified in § 101.21 of this chapter.

16. A new Subpart H is added to read as follows.

**Subpart H – Competitive Bidding Procedures for the
3650-3700 MHz Band**

§ 27.701 3650-3700 MHz band subject to competitive bidding.

Mutually exclusive initial applications for terrestrial service licenses in the 3650-3700 MHz band are subject to competitive bidding procedures. The procedures set forth in part 1, subpart Q, of this chapter will apply unless otherwise provided in this part.

§ 27.702 Designated entities.

(a) Eligibility for small business provisions.

(1) A very small business is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.

(2) A small business is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding \$15 million for the preceding three years.

(3) An entrepreneur is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding \$40 million for the preceding three years.

(4) For purposes of determining whether an entity meets any of the definitions set forth in paragraphs (a)(1), (a)(2), or (a)(3) of this section, the gross revenues of the entity, its controlling interests and affiliates shall be considered in the manner set forth in § 1.2110(b) and (c) of this chapter.

(5) A consortium of very small businesses is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (a)(1) of this section. A consortium of small businesses is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (a)(2) of this section. A consortium of entrepreneurs is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (a)(3) of this section. Where an applicant or licensee is a consortium of small businesses (or very small businesses or entrepreneurs), the gross revenues of each small business (or very small business or entrepreneur) shall not be aggregated.

(b) Bidding credits. A winning bidder that qualifies as a very small business or a consortium of very small businesses as defined in this section may use the bidding credit specified in § 1.2110(f)(2)(i) of this chapter. A winning bidder that qualifies as a small business or a consortium of small businesses as defined in this section may use the bidding credit specified in § 1.2110(f)(2)(ii) of this chapter. A winning bidder that qualifies as an entrepreneur or a consortium of entrepreneurs as defined in this section may use the bidding credit specified in § 1.2110(f)(2)(iii) of this chapter.

APPENDIX F

PRELIMINARY LISTS OF GRANDFATHERED FSS EARTH STATIONS³⁶⁸

NOTE: A FINAL LIST WILL BE ISSUED IN A FUTURE PUBLIC NOTICE

Table 1: Authorized Extended C-Band Earth Stations (Receive at 3625-3700 MHz and Transmit at 5850-5925 MHz) ³⁶⁹				
State	City	North Latitude	West Longitude	License
California	Carmel Valley	36° 24' 10"	121° 38' 48"	KA23
	Culver City	34° 01' 06"	118° 24' 13"	KA298
	Livermore	37° 45' 40"	121° 47' 53"	KA232
	Los Angeles	34° 01' 53"	118° 27' 18"	KA382
		34° 01' 54"	118° 27' 15"	KA383
	Malibu	34° 04' 49.7"	118° 53' 44"	KA91
		34° 04' 50.3"	118° 53' 46"	KA273
		34° 4' 51"	118° 53' 44"	KB32
	Mountain House	37° 45' 01"	121° 35' 34"	KA206
		37° 45' 02"	121° 35' 35"	KA86
	Niles Canyon	37° 35' 56"	121° 56' 32"	KA93
		37° 36' 00"	121° 56' 35"	KA82
	Salt Creek	38° 56' 20.2"	122° 08' 48"	KA371
		38° 56' 21"	122° 08' 49"	KA372
		38° 56' 22.3"	122° 08' 50"	KA373
	Somis	34° 19' 31"	118° 59' 41"	KA318
	Sylmar	34° 19' 04"	118° 29' 00"	KA274

³⁶⁸ See n.5, *supra*.

³⁶⁹ Most of these earth stations are authorized to make use of both C-band (3700-4200 MHz for downlinks and 5925-6425 MHz band for uplinks) and extended C-band frequencies (3625-3700 MHz for downlinks and 5850-5925 MHz for uplinks).

Table 1 continued: Authorized Extended C-Band Earth Stations

State	City	North Latitude	West Longitude	License
Florida	Medley	25° 50' 26"	80° 19' 03"	E960406
		25° 51' 19"	80° 19' 52"	E960068
	Melbourne	28° 02' 25"	80° 35' 48"	KA354
		28° 05' 10"	80° 38' 10"	E950276
	Miami	25° 48' 34"	80° 21' 11"	E940470
		25° 48' 35"	80° 21' 10"	KA407
		25° 48' 35"	80° 21' 11"	KA412
	Miramar	25° 58' 32"	80° 17' 00"	E960105
Orlando	28° 25' 29"	81° 07' 21"	KA280	
Palm Bay	28° 02' 28"	80° 35' 42"	KA400	
Guam	Pulantat	13° 25' 00"	144° 44' 57" ³⁷⁰	KA28 KA326
Hawaii	Paumalu	21° 40' 26"	158° 2' 13"	KA25
		21° 40' 27"	158° 2' 16"	KA265
		21° 40' 27"	158° 2' 16"	KA266
		21° 40' 25.5"	158° 2' 16"	KA267
		21° 40' 25"	158° 2' 16"	KA268
		21° 40' 24"	158° 2' 16"	KA269
Maine	Andover	44° 37' 57"	70° 42' 01"	KA276
		44° 37' 58"	70° 41' 54"	KA349
West Virginia	Etam	39° 16' 48"	79° 44' 14"	WA21
		39° 16' 50"	79° 44' 13"	KA378
Maryland	Clarksburg	39° 13' 5.6"	77° 16' 12"	KA259
		39° 13' 07"	77° 16' 12"	KA275
		39° 13' 5"	77° 16' 12"	KA260
		39° 13' 2.2"	77° 16' 12"	KA261
		39° 13' 1.4"	77° 16' 13"	KA262
		39° 13' 4.8"	77° 16' 15"	KA263
		39° 13' 4.8"	77° 16' 15"	KA264

³⁷⁰ Guam's longitude coordinate is East, not West.

Table 1 continued: Authorized Extended C-Band Earth Stations

State	City	North Latitude	West Longitude	License
Massachusetts	Whitinsville	42° 07' 01"	71° 38' 11"	E980517
Midway Atoll	Midway Atoll	28° 13' 11"	177° 22' 5"	E960325
New Jersey	Franklin	41° 07' 04"	74° 34' 33"	E6777 KA231
New York	Hauppauge	40° 49' 15"	73° 15' 50"	E950436
	Staten Island	40° 36' 13"	74° 10' 39"	KA308
North Carolina	West Jefferson	36° 25' 50"	81° 23' 45"	E970334
Oregon	Moore Valley	45° 20' 33"	123° 17' 15"	CSG-90-101-P/L
Pennsylvania	Roaring Creek	40° 53' 35.9"	76° 26' 23"	KA444
		40° 53' 37.5"	76° 26' 22"	WA33
Puerto Rico	Carolina	18° 26' 00"	65° 59' 35"	KA377
	Cayey	18° 08' 00"	66° 07' 57"	KA320
	Humacao	18° 09' 05"	65° 47' 20"	E872647
	Rio Piedras	18° 14' 30"	66° 01' 50"	KA403
Tennessee	Nashville	36° 14' 6.2"	86° 45' 20"	E970010
		36° 14' 5.7"	86° 45' 19"	E960073
		36° 14' 5.7"	86° 45' 21"	E960050
Texas	Desoto	32° 37' 48"	96° 50' 32"	KA306
Virginia	Alexandria	38° 47' 36"	77° 09' 59"	KA81
	Reston	38° 57' 00"	77° 22' 40"	E950406
	Shenandoah	38° 43' 45"	78° 39' 26"	KA255
Washington	Brewster	48° 08' 51"	119° 41' 29"	KA294
		48° 08' 51"	119° 41' 29"	E960222
West Virginia	Albright	39° 34' 07"	79° 34' 45"	KA413
	Rowlesburg	39° 16' 52.1"	79° 44' 11"	KA351

Table 2: Sites Authorized for Less than the Entire 3650-3700 MHz C-Band

Band	City, State	Latitude	Longitude	License
3685-3700 MHz	Miami, Florida	25° 28' 48"	80° 10' 48"	E970362
	Atlanta, Georgia	33° 52' 38.2"	84° 27' 58"	E970197
	Marietta, Georgia	33° 55' 41"	84° 29' 45"	E970364
	Guaynabo, Puerto Rico	18° 34' 10"	66° 23' 00"	E970195
	San Juan, Puerto Rico	18° 22' 00"	66° 07' 00"	E970196
3698.7-3698.7 MHz	Rio Piedras, Puerto Rico	18° 22' 59"	66° 04' 09"	KA426
	Caguas, Puerto Rico	18° 17' 53"	66° 03' 14"	E950405

Table 3: Authorized TT&C Sites
(Receive at 3698.5-3699.5 MHz and Transmit at 5923.5-5924.5 MHz)

City, State	Latitude	Longitude	License
Three Peaks, California	38° 8' 51.9"	122° 47' 38"	E950208
Hawley, Pennsylvania	41° 27' 51"	75° 7' 48"	E950209

Table 4: Authorized TT&C Sites
(Receive at 3698.3-3699.7 MHz and Transmit at 5923-5924 MHz)

City, State	Latitude	Longitude	License
CHEYENNE, WY	41° 7' 56"	104° 44' 11"	E950253
CHEYENNE, WY	41° 7' 55.7"	104° 44' 12"	E980118

APPENDIX G:

**MAP OF COORDINATION ZONES AROUND GRANDFATHERED FSS EARTH STATIONS
AND GRANDFATHERED GOVERNMENT RADIOLOCATION STATIONS**

