

APPENDICES

APPENDIX A -- INITIAL REGULATORY FLEXIBILITY ANALYSIS

(for Notice of Proposed Rule Making)

As required by the Regulatory Flexibility Act (RFA),¹ 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 Notice of Proposed Rulemaking (*Notice*), WT Docket No. 02-08. 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* as provided above. The Commission will send a copy of the *Notice*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.² In addition, the *Notice* and IRFA (or summaries thereof) will be published in the Federal Register.³

Need for, and Objectives of, the Proposed Rules:

In this *Notice*, we propose rules for the licensing and operation of fixed and mobile services in the 216-220 MHz, 1390-1395 MHz, 1427-1429.5 MHz, 1429.5-1432 MHz, 1432-1435 MHz, 1670-1675 MHz and 2385-2390 MHz bands pursuant to the provisions of the Communications Act of 1934, as amended, the Omnibus Budget Reconciliation Act of 1993 (OBRA-93), and the Balanced Budget Act of 1997 (BBA-97). These seven bands have a variety of continuing Government protection requirements and incumbent Government and non-Government uses. Despite these constraints and the relatively narrow bandwidth contained in each of the bands, we believe that the *Notice* will foster a variety of potential applications in both new and existing services. The transfer of these bands to non-Government use should enable the development of new technologies and services, provide additional spectrum relief for congested private land mobile frequencies, and fulfill our obligations as mandated by Congress to assign this spectrum for non-Government use.

We generally seek comment on the following issues under consideration for new services in the paired 1392-1395 MHz and 1432-1435 MHz bands and the unpaired 1390-1392 MHz, 1670-1675 MHz and 2385-2390 MHz bands:

- whether to authorize new services under Part 27 of our Rules;
- whether to license new services by geographic service areas;
- whether to license band managers in any of these bands;
- whether to provide for partitioning and disaggregation of licensed spectrum; and
- whether to adopt technical rules in order to prevent in-band and out-of-band interference.

¹ 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).

² 5 U.S.C. § 603(a).

³ *See id.*

We also address several issues relating to existing services currently operating in the 216-220 MHz, 1427-1429.5 MHz and 1429.5-1432 MHz bands. We seek comment on the following issues:

- whether secondary telemetry in the 217-220 MHz and 1427-1429.5 MHz bands should be licensed on a site-by-site basis;
- whether primary telemetry in the 1429.5-1432 MHz band should be licensed on a site-by-site basis;
- whether to add technical specifications to Part 90 of our Rules for telemetry operations;⁴
- whether to apply the frequency coordination procedures of Section 90.175 to authorization of future telemetry operations.

In accordance with Section 309(j) of the Communication Act, if we adopt a licensing scheme under which mutually exclusive applications are accepted for filing, we must resolve such mutually exclusive applications by competitive bidding.⁵ We propose to conduct the auction of such licenses in conformity with the general competitive bidding rules set forth in Part 1, Subpart Q, of the Commission's Rules.⁶

Additionally, we seek comment on a petition for rulemaking filed on March 6, 2000, by Data Flow Systems, Inc., (Data Flow), requesting that the Commission amend Sections 90.35 and 90.259 of the Commission's Rules to allow the use of fixed telemetry in the 216-220 MHz band.⁷ We also seek comment on a proposal filed by Securicor Wireless Holdings, Inc. (Securicor) in response to the *Reallocation Notice*.⁸ Securicor seeks to license "white-space" in the 216-220 MHz band similar to the paradigm established for land mobile use of the 220-222 MHz band. Lastly, we request comment on a proposal submitted by Warren Havens (Havens) in response to the *Reallocation Notice* that seeks the creation of a new "Advanced Technologies 220 MHz" Service in the 216-225 MHz band.⁹

⁴ Prior to the release of the *Reallocation Report and Order*, Section 90.259 of our Rules permitted telemetry operations throughout the entire 216-220 MHz band and in the 1427-1435 MHz band. See 47 C.F.R. § 90.259 (2000). We note that in the *Reallocation Report and Order*, telemetry is limited to the 216-220 MHz band (secondary), the 1427-1429.5 MHz band (secondary) and the 1429.5-1432 MHz band (primary). New telemetry operations in the 216-217 MHz portion of the 216-220 MHz band will no longer be authorized after January 1, 2002. See *Reallocation Report and Order* at ¶ 26.

⁵ 47 U.S.C. § 309(j).

⁶ 47 C.F.R. § Part 1, Subpart Q.

⁷ Petition for Rulemaking filed by Data Flow Systems, Inc. on March 6, 2000, RM-9882 (*Data Flow Petition for Rulemaking*). The Commission's Rules currently do not permit this use. See 47 C.F.R. §§ 90.35 and 90.259.

⁸ See Securicor Comments filed on March 8, 2001 (*Securicor Comments*).

⁹ See Warren Havens Comments filed on March 8, 2001 (*Havens Comments*).

Legal Basis for Proposed Rules:

The proposed action is authorized under Sections 1, 4(i), 302, 303(f) and (r), and 332 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 1, 154(i), 302, 303(f) and (r), and 332(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.¹⁰ The RFA defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."¹¹ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.¹² A small business concern is one which: (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).¹³ A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."¹⁴ Nationwide, as of 1992, there were approximately 275,801 small organizations.¹⁵ "Small governmental jurisdiction"¹⁶ generally means "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000."¹⁷ As of 1992, there were approximately 85,006 governmental entities in the United States.¹⁸ This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96%, have populations of fewer than 50,000.¹⁹ The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (96%) are small entities.

¹⁰ 5 U.S.C. § 603(b)(3).

¹¹ 5 U.S.C. § 601(6).

¹² 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

¹³ Small Business Act, 15 U.S.C. § 632 (1996).

¹⁴ 5 U.S.C. § 601(4).

¹⁵ 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

¹⁶ 47 C.F.R. § 1.1162.

¹⁷ 5 U.S.C. § 601(5).

¹⁸ U.S. Dept. of Commerce, Bureau of the Census, "1992 Census of Governments."

¹⁹ *Id.*

With respect to the 1390-1395 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz bands, the Commission has not yet determined how many licenses will be awarded and does not know how many licensees will partition their license areas or disaggregate their spectrum blocks, if partitioning and disaggregation are allowed. Moreover, the Commission does not yet know how many applicants or licensees in these bands will be small entities. 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 by our proposed small business definitions for these bands. We invite comment on this analysis.

Existing services in other bands include entities that might be affected by the proposed rules, either as existing licensees or potential applicants or licensees. Incumbent services in the 216-220 MHz band include the Automated Maritime Telecommunications Service (AMTS), the "218-219 MHz" Service, the Low Power Radio Service (LPRS) and telemetry. Incumbent services in the 1427-1429.5 MHz and 1429.5-1432 MHz bands include wireless medical telemetry (WMTS) and general telemetry.

AMTS. For future auctions in the AMTS, the Commission has proposed to define small businesses as those entities, together with their affiliates and controlling interests, with not more than \$15 million in average gross revenues for the preceding three years, and very small businesses as those entities, together with their affiliates and controlling interests, with not more than \$3 million in average gross revenues for the preceding three years.²⁰ Currently, there are only three AMTS licensees, none of whom are small businesses. However, potential licensees in AMTS include all public coast stations, which are classified by the Small Business Administration as Radiotelephone Service Providers, Standard Industrial Classification Code 4812.²¹ The Commission does not yet know how many applicants or licensees in these bands will be small entities. 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 by our proposed small business definitions for these bands.

"218-219 MHz" Service. For the first auction of the "218-219 MHz" Service the Commission defined a small business as an entity, together with its affiliates, that has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.²² For that auction, 170 entities won licenses for 594 Metropolitan Statistical Area (MSA) licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. Subsequently, the Commission changed the service rules and defined small businesses as those entities, together with their affiliates and controlling interests, with not more than \$15 million in average gross revenues for the preceding three years, and very small businesses as those entities, together with their affiliates and controlling interests, with not more than \$3 million in average gross revenues for the preceding three years.²³ We cannot estimate, however,

²⁰ See Letter from Aida Alvarez, Administrator for Size Standards, U.S. Small Business Administration, to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, dated November 3, 2000. See also *AMTS Fourth Report and Order and Third NPRM*, 15 FCC Rcd 22585 (2000).

²¹ See 13 C.F.R. § 121.201.

²² Implementation of Section 309(j) of the Communications Act – Competitive Bidding, PP Docket No. 93-253, *Fourth Report and Order*, 9 FCC Rcd 2330, 2336 (1994).

²³ See Letter from Aida Alvarez, Administrator for Size Standards, U.S. Small Business Administration, to Daniel B. Phythyon, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, dated January 6, 1998.

the number of licenses that will be won by entities qualifying as small businesses under our rules in future auctions of 218-219 MHz spectrum licenses. Given the success of small businesses in the first auction, we assume for purposes of this IRFA that in future auctions all of the licenses in the "218-219 MHz" Service may be awarded to small businesses.

Low Power Radio Service. The Low Power Radio Service permits licensees to use the 216-217 MHz segment for auditory assistance, medical devices, and law enforcement tracking devices. Users are likely to be theaters, auditoriums, churches, schools, banks, hospitals, and medical care facilities. The primary manufacturer of auditory assistance estimates that it has sold 25,000 pieces of auditory assistance equipment. Many if not most LPRS users are likely to be small businesses or individuals. However, because the LPRS is licensed by rule, with no requirement for individual license applications or documents, the Commission is unable to estimate how many small businesses make use of LPRS equipment.

Telemetry. Incumbent telemetry operators in the 216-220 MHz band include entities such as Fairfield Industries, Inc. which perform geophysical exploration for underground oil and natural gas reserves. Incumbent non-medical telemetry operators in the 1427-1429.5 MHz and 1429.5-1432 MHz bands include Itron, Inc., Pueblo Service Company of Colorado and E Prime, Inc., and large manufacturers such as Deere and Company, Caterpillar, and General Dynamics. None of these licensees are likely to be small businesses. Itron, Inc. is the primary user of the 1427-1429.5 MHz and 1429.5-1432 MHz bands. Itron, Inc., with an investment of \$100 million in equipment development, is not likely to be a small business. One licensee, Zytex, a manufacturer of high-speed telemetry systems, may be a small business. The Commission does not yet know how many applicants or licensees in these bands will be small entities. We therefore assume that, for purposes of our evaluations and conclusions in the IRFA, all prospective licensees are small entities.

WMTS. Users of medical telemetry are hospitals and medical care facilities, some of which are likely to be small businesses. According to the SBA's regulations, hospitals and nursing homes must have annual gross receipts of \$5 million or less in order to qualify as a small business concern. There are approximately 11,471 nursing care firms in the nation, of which 7,953 have annual gross receipts of \$5 million or less.²⁴ There are approximately 3,856 hospital firms in the nation, of which 294 have gross receipts of \$5 million or less. Thus, the approximate number of small confined setting entities to which the Commission's new rules will apply is 8,247.

Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements:

Applicants for licenses to provide terrestrial fixed and mobile services in the paired 1392-1395 MHz and 1432-1435 MHz bands, the unpaired 1390-1392 MHz band, the unpaired 1670-1675 MHz band, and the unpaired 2385-2390 MHz band will be required to submit short-form auction applications using FCC Form 175.²⁵ In addition, winning bidders must submit long-form license applications through the Universal Licensing System using FCC Form 601,²⁶ and other appropriate forms.²⁷

²⁴ See Small Business Administration Tabulation File, SBA Size Standards Table 2C, January 23, 1996, SBA, Standard Industrial Code (SIC) categories 8050 (Nursing and Personal Care Facilities) and 8060 (Hospitals). (SBA Tabulation File).

²⁵ 47 C.F.R. § 1.2105.

²⁶ 47 C.F.R. § 1.913(a)(1).

²⁷ 47 C.F.R. § 1.2107.

Licenses will also be required to apply for an individual station license by filing FCC Form 601 for those individual stations that (1) require submission of an Environmental Assessment under Section 1.1307 of our Rules;²⁸ (2) require international coordination;²⁹ (3) would operate in the quiet zones listed in Section 1.924 of our Rules;³⁰ or (4) require coordination with the Frequency Assignment Subcommittee (FAS) of the Interdepartment Radio Advisory Committee (IRAC).³¹ We invite comment on how these filing requirements can be modified to reduce the burden on small entities.

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 (among others): (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.³²

We have reduced burdens wherever possible. To minimize any negative impact, however, we propose certain incentives for small entities that will redound to their benefit. These special provisions include partitioning and spectrum disaggregation.³³ These provisions will allow smaller entities to overcome entry barriers. In addition, we seek comment on whether it would be appropriate to license the paired 1392-1395 MHz and 1432-1435 MHz bands and the unpaired 1390-1392 MHz, 1670-1675 MHz and 2385-2390 MHz bands for fixed and mobile services using smaller geographical licensing areas.³⁴ The use of smaller licensing areas could benefit small entities by reducing costs and build-out expenses.

We also propose the use of bidding credits for small entities that participate in auctions of licenses that are conducted pursuant to the rules proposed in this Notice. Thus, for the paired 1392-1395 MHz and 1432-1435 MHz bands and the unpaired 1390-1392 MHz, 1670-1675 MHz, and 2385-2390 MHz bands, we propose to define an "entrepreneur" as an entity with average annual gross revenues not exceeding \$40 million for the three preceding years and we propose to define a "small business" as an entity with average annual gross revenues not exceeding \$15 million for the three preceding years. With respect to the 1427-1432 MHz band, in which we believe that the capital costs of providing primary general telemetry service will in general be lower than the capital costs for the

²⁸ 47 C.F.R. § 1.1307.

²⁹ See, e.g., 47 C.F.R. § 1.928 (regarding frequency coordination arrangements between the U.S. and Canada).

³⁰ 47 C.F.R. § 1.924.

³¹ We discuss FAS coordination in the section describing coordination with Government incumbents. See *supra* Section III.E.3.

³² See 5 U.S.C. § 603(c).

³³ See *supra* Section III.B.5

³⁴ See *supra* Section III.A.3.

bands discussed above, we propose to define a "small business" as an entity with average annual gross revenues not exceeding \$15 million for the three preceding years and a "very small business" as an entity with average annual gross revenues not exceeding \$3 million for the three preceding years. We further propose to provide entrepreneurs with a bidding credit of 15 percent, small businesses with a bidding credit of 25 percent, and very small businesses with a bidding credit of 35 percent. We believe that these bidding credits will help small entities compete in our auctions and acquire licenses. We seek comment on our proposed small business definitions and bidding credits, including information on factors that may affect the capital requirements of the type of services a licensee may seek to provide.

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.

Report to Small Business Administration:

The Commission will send a copy of this Notice of Proposed Rulemaking, including a copy of the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration. The Notice of Proposed Rulemaking and IRFA (or summaries there of) will also be published in the Federal Register.

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

None.

APPENDIX B -- List of Incumbent Licensees in 1429.5-1432 MHz Band

Name of Existing Licensee	Frequency	Location Type	Area of Operation(s)
Deere & Company (KA73480)	1431.5 MHz	Mobile	161 kilometers centered on a point in Linn County, Iowa
General Dynamics Defense Systems, Inc. (KB50425)	1432 MHz	Mobile	8 kilometers centered on a point in Berkshire County, Massachusetts
Itron, Inc. (WPCG645)	1427-1432 MHz	Temporary Fixed and Mobile	Nationwide Continental North and South of Line A, West and East of Line C including, Alaska, Hawaii, American Samoa, Guam, North Mariann Islands, Puerto Rico and Virgin Islands.
Mississippi State University (KNBH804)	1433 MHz	Fixed	Starkville, MS
The Boeing Company (WCB372)	1433 MHz	Fixed	Wrightwood, California
Zytex Instruments, Ltd. (WPNV482)	1431 MHz	Itinerant	3.0 kilometers centered on points in the following counties: Henry, Georgia San Bernardino, California Cabarrus, North Carolina Volusia, Florida Northampton, Pennsylvania Marion, Indiana Sonoma, California Talladega, Alabama Tarrant, Texas Schuyler, New York
Zytex Sports Telemetry Inc. (WPPD284)	1431 MHz	Itinerant	3.0 kilometers centered on points in the following counties: Henry, Georgia San Bernardino, California Cabarrus, North Carolina Volusia, Florida Northampton, Pennsylvania Marion, Indiana Sonoma, California Talladega, Alabama Tarrant, Texas Schuyler, New York

Appendix C -- Proposed Definitions and Rules

1. Part 1 of title 47 of the Code of Federal Regulations, is proposed to be amended as follows:

PART 1 – PRACTICE AND PROCEDURE

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

AUTHORITY: 47 U.S.C. 151, 154(i), 154(j), 155, 225, 303(r), 309, and 325(e) unless otherwise noted.

3. We propose to amend Section 1.924(f) to read as follows:

§ 1.924 Quiet zones.

* * * * *

(f) GOES. The requirements of this paragraph are intended to minimize harmful interference to Geostationary Operational Environmental Satellite earth stations receiving in the band 1670-1675 MHz, which are located at Wallops Island, Virginia, Fairbanks, Alaska and Greenbelt Maryland.

(1) Applicants and licensees planning to construct and operate a new or modified station within the area bounded by a circle with a radius of 100 kilometers (62.1 miles) that is centered on 37° 56' 47" N, 75° 27' 37" W (Wallops Island) or 64° 58' 36" N, 147° 31' 03" W (Fairbanks) or within the area bounded by a circle with a radius of 65 kilometers (40.4 miles) that is centered on 39° 00' 02" N, 76° 50' 31" W (Greenbelt) must notify the National Oceanic and Atmospheric Administration (NOAA) of the proposed operation. For this purpose, NOAA maintains the GOES coordination web page at <http://www.osd.noaa.gov/radio/frequency.htm>, which provides the technical parameters of the earth stations and the point-of-contact for the notification. The notification shall include the following information: requested frequency, geographical coordinates of the antenna location, antenna height above mean sea level, antenna directivity, emission type, equivalent isotropically radiated power, antenna make and model, and transmitter make and model.

(2) When an application for authority to operate a station is filed with the FCC, the notification required in paragraph (f)(1) of this section should be sent at the same time. The application must state the date that notification in accordance with paragraph (f)(1) of this section was made. After receipt of such an application, the FCC will allow a period of 20 days for comments or objections in response to the notification.

(3) If an objection is received during the 20-day period from NOAA, the FCC will, after consideration of the record, take whatever action is deemed appropriate.

4. Part 2 of title 47 of the Code of Federal Regulations is proposed to be amended as follows:

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

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

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

6. We propose to amend Section 2.106, the Table of Frequency Allocations by revising footnotes US350 and US362 as follows:

§ 2.106 Table of Frequency Allocations.

* * * * *

UNITED STATES (US) FOOTNOTES

* * * * *

US350 In the bands 608-614 MHz and 1395-1400 MHz the Government and non-Government land mobile service is limited to medical telemetry and medical telecommand operations. Availability and use of medical telemetry and telecommand and non-medical telemetry and telecommand in the bands 1427-1429.5 MHz and 1429.5-1432 MHz are described below:

Location (see §§ 90.259(b)(4) and 95.630(b) of this chapter for a detailed description)	1427-1429.5 MHz	1429.5-1432 MHz
Austin/Georgetown, Texas	Non-Government land mobile service is limited to telemetry and telecommand operations.	Government and non-Government land mobile service is limited to medical telemetry and telecommand operations.
Battle Creek, Michigan		
Detroit, Michigan		
Pittsburgh, Pennsylvania		
Richmond/Norfolk, Virginia		
Spokane, Washington		
Washington, DC metropolitan area		Non-Government telemetry and telecommand use is permitted on a secondary basis.
Rest of U.S.	Government and non-Government land mobile service is limited to medical telemetry and telecommand operations. Non-Government telemetry and telecommand use is permitted on a secondary basis.	Non-Government land mobile service is limited to telemetry and telecommand operations.

* * * * *

US362 The band 1670-1675 MHz is allocated to the meteorological-satellite service (space-to-Earth) on a primary basis for Government use. Earth station use of this allocation is limited to Wallops Island, VA (37° 56' 47" N, 75° 27' 37" W), Fairbanks, AK (64° 58' 36" N, 147° 31' 03" W), and Greenbelt, MD (39° 00' 02" N, 76° 50' 31" W). Applicants for non-Government stations within 100 kilometers of the Wallops Island or Fairbanks coordinates and within 65 kilometers of the Greenbelt coordinates shall notify NOAA in accordance with the procedures specified in 47 C.F.R. § 1.924.

7. Part 27 of title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

8. 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.

9. We propose to add the following definitions to Section 27.4:

§ 27.4 Terms and definitions.

* * * * *

Band Manager. The term *Band Manager* refers to a licensee in the 1390-1392 MHz, 1392-1395 MHz, 1432-1435 MHz, 1670-1675 MHz and 2385-2390 MHz bands that functions solely as a spectrum broker by subdividing its licensed spectrum and making it available to system operators or directly to end users for fixed or mobile communications consistent with Commission Rules. A *Band Manager* is directly responsible for any interference or misuse of its licensed frequency arising from its use by such non-licensed entities.

10. We propose to add a new Subpart to Part 27 as follows:

Subpart H – 1.4 GHz Service

§ 27.701 Scope.

This subpart sets out the regulations governing service in the paired 1392-1395 MHz and 1432-1435 MHz bands as well as the unpaired 1390-1392 MHz band (1.4 GHz Service).

§ 27.702 Permissible communications.

Licensees in the paired 1392-1395 MHz and 1432-1435 MHz bands and unpaired 1390-1392 MHz band are authorized to provide fixed or mobile service, except aeronautical service, subject to the technical requirements of this subpart.

§ 27.703 Coordination requirements.

- (a) Licensees in the 1.4 GHz Service will be issued geographic area licenses.
- (b) Licensees in the 1.4 GHz Service must file a separate station application with the Commission and obtain an individual station license, prior to construction or operation, of any station:
 - (1) that requires submission of an Environmental Assessment under Part 1, § 1.1307;
 - (2) that requires international coordination;
 - (3) that operates in the quiet zones listed in Part 1, §1.924; or
 - (4) that requires approval of the Frequency Advisory Subcommittee (FAS) of the Interdepartment Radio Advisory Committee (IRAC). Stations that require FAS approval are as follows:

(i) licensees in the 1390-1392 MHz and 1392-1395 MHz band must receive FAS approval prior to operation of fixed sites or mobile units within the NTIA recommended protection radii of the Government sites listed in footnote US351 of § 2.106.

(ii) licensees in the 1432-1435 MHz band must receive FAS approval, prior to operation of fixed sites or mobile units within the NTIA recommended protection radii of the Government sites listed in footnote US361 of § 2.106.

(c) Prior to construction of a station, a 1.4 GHz licensee must register with the Commission any station antenna structure for which notification to the Federal Aviation Administration is required by Part 17 of this chapter.

(d) It is the licensee's responsibility to determine whether an individual station needs referral to the Commission.

(e) The notification required in subparagraph (b) must be filed on the Universal Licensing System.

§ 27.704 Geographic partitioning and spectrum disaggregation.

An entity that acquires a portion of a 1.4 GHz licensee's geographic area or spectrum subject to a geographic partitioning or spectrum disaggregation agreement under § 27.15 must function as a 1.4 GHz licensee and is subject to the obligations and restrictions on the 1.4 GHz license as set forth in this subpart.

§ 27.705 1.4 GHz Service licenses subject to competitive bidding.

Mutually exclusive initial applications for 1.4 GHz Service licenses in the paired 1392-1395 MHz and 1432-1435 MHz bands as well as the unpaired 1390-1392 MHz band are subject to competitive bidding. The general competitive bidding procedures set forth in Part 1, Subpart Q of this chapter will apply unless otherwise provided in this part.

§ 27.706 Designated entities.

(a) Eligibility for small business provisions for 1.4 GHz Service licenses in the paired 1392-1395 MHz and 1432-1435 MHz bands and the unpaired 1390-1392 MHz band.

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

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

(3) 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)(1) 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)(2) of this section.

(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.

(b) Bidding credits. 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.

11. We propose to add a new Subpart to Part 27 as follows:

Subpart I - 1670-1675 MHz Service.

§ 27.801 Scope.

This subpart sets out the regulations governing service in the 1670-1675 MHz band (1670-1675 MHz Service).

§ 27.802 Permissible communications.

Licensees in the 1670-1675 MHz Service are authorized to provide fixed or mobile service, except aeronautical mobile service, subject to the technical requirements of this subpart.

§ 27.803 Coordination requirements.

(a) Licensees in the 1670-1675 MHz Service will be issued geographic area licenses.

(b) Licensees in the 1670-1675 MHz Service must file a separate station application with the Commission and obtain an individual station license, prior to construction or operation, of any station:

(1) that requires submission of an Environmental Assessment under Part 1, § 1.1307;

(2) that requires international coordination;

(3) that operates in the quiet zones listed under Part 1, § 1.924.

(c) The notification required in subparagraph (b) must be filed on the Universal Licensing System.

(d) Prior to construction of a station, a licensee must register with the Commission any station antenna structure for which notification to the Federal Aviation Administration is required by Part 17 of this chapter.

(e) It is the licensee's responsibility to determine whether an individual station requires referral to the Commission.

§ 27.804 Geographic partitioning and spectrum disaggregation.

An entity that acquires a portion of a 1670-1675 MHz licensee's geographic area or spectrum subject to a geographic partitioning or spectrum disaggregation agreement under § 27.15 must function as a 1670-1675 MHz licensee and is subject to the obligations and restrictions on the 1670-1675 MHz license as set forth in this subpart.

§ 27.805 1670-1675 MHz Service licenses subject to competitive bidding.

Mutually exclusive initial applications for 1670-1675 MHz Service licenses are subject to competitive bidding. The general competitive bidding procedures set forth in Part 1, Subpart Q of this chapter will apply unless otherwise provided in this part.

§ 27.806 Designated entities.

(a) Eligibility for small business provisions.

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

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

(3) 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)(1) 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)(2) of this section.

(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.

(b) Bidding credits. 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.

12. We propose to add a new Subpart to Part 27 as follows:

Subpart J - 2385-2390 MHz Service.**§ 27.901 Scope.**

This subpart sets out the regulations governing service in the 2385-2390 MHz band (2385-2390 MHz Service).

§ 27.902 Permissible communications.

Licenses in the 2385-2390 MHz Service are authorized to provide fixed or mobile service subject to the technical requirements of this subpart.

§ 27.903 Coordination requirements.

- (a) Licensees in the 2385-2390 MHz Service will be issued geographic area licenses.
- (b) Licensees in the 2385-2390 MHz Service must file a separate station application with the Commission and obtain an individual station license, prior to construction or operation, of any station:
 - (1) that requires submission of an Environmental Assessment under Part 1, § 1.1307;
 - (2) that requires international coordination;
 - (3) that operates in the quiet zones listed in Part 1, § 1.924;
 - (4) that requires approval of the Frequency Advisory Subcommittee (FAS) of the Interdepartment Radio Advisory Committee (IRAC). Licensees in the 2385-2390 MHz Service must receive FAS approval prior to operation of fixed sites or mobile units within the NTIA recommended protection radii of the Government aeronautical telemetry sites listed in footnote US363 of § 2.106.
 - (5) that would require approval of the Aeronautical Flight Test Radio Coordinating Council (AFTRCC). Licensees in the 2385-2390 MHz Service must receive AFTRCC approval prior to operation of fixed sites or mobile units within the AFTRCC recommended protection radii of the non-Government flight test operations listed in footnote US363 of § 2.106.
- (c) Prior to construction of a station, the 2385-2390 MHz licensee must register with the Commission any station antenna structure for which notification to the Federal Aviation Administration is required by Part 17 of this chapter.
- (d) It is the licensee's responsibility to determine whether a referral to the Commission is needed for any individual station constructed.
- (e) The notification required in subparagraph (b) must be filed on the Universal Licensing System.

§ 27.904 Geographic partitioning and spectrum disaggregation.

An entity that acquires a portion of a 2385-2390 MHz licensee's geographic area or spectrum subject to a geographic partitioning or spectrum disaggregation agreement under § 27.15 must function as a 2385-2390 MHz licensee and is subject to the obligations and restrictions on the 2385-2390 MHz license as set forth in this subpart.

§ 27.905 2385-2390 MHz Service licenses subject to competitive bidding.

Mutually exclusive initial applications for 2385-2390 MHz Service licenses are subject to competitive bidding. The general competitive bidding procedures set forth in Part 1, Subpart Q of this chapter will apply unless otherwise provided in this part.

§ 27.906 Designated entities.

- (a) Eligibility for small business provisions.

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

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

(3) 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)(1) 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)(2) of this section.

(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.

(b) Bidding credits. 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.

13. We propose to add a new Subpart to Part 27 as follows:

Subpart K - Band Managers.

§ 27.1001 Scope.

This subpart sets out the regulations governing Band Managers in the paired 1392-1395 MHz and 1432-1435 MHz bands and unpaired 1390-1392 MHz, 1670-1675 MHz and 2385-2390 MHz bands.

§ 27.1002 Permissible communications.

Band Managers are authorized to allow a spectrum user to provide fixed or mobile service subject to the technical requirements of this subpart.

§ 27.1002 Band Manager authority.

(a) A Band Manager may allow a spectrum user, pursuant to a written agreement, to construct and operate stations at any available site within the licensed area and on any channel for which the Band Manager is licensed, provided such stations comply with Commission Rules and coordination requirements.

(b) A Band Manager may allow a spectrum user, pursuant to a written agreement, to delete, move or change the operating parameters of any of the user's stations that are covered under the Band Manager's license without prior Commission approval, provided such stations comply with Commission Rules and coordination requirements.

§ 27.1003 Band Manager agreements.

Band Managers are required to enter into written agreements regarding the use of their licensed spectrum by others, subject to the following conditions:

(a) The duration of spectrum user agreements may not extend beyond the term of the Band Manager's FCC license.

(b) The spectrum user agreement must specify in detail the operating parameters of the spectrum user's system, including power, maximum antenna heights, frequencies of operation, base station location(s), area(s) of operation.

(c) The spectrum user agreement must require the spectrum user to use Commission-approved equipment where appropriate and to complete post-construction proofs of system performance prior to system activation.

(d) The spectrum user must agree to operate its system in compliance with all technical specifications for the system contained in the agreement and agree to cooperate fully with any investigation or inquiry conducted by either the Commission or the Band Manager.

(e) The spectrum user must agree to comply with all applicable Commission rules, and the spectrum user must accept Commission oversight and enforcement.

(f) The spectrum user agreement must stipulate that if the Band Manager determines that there is an ongoing violation of the Commission's rules or that the spectrum user's system is causing harmful interference, the Band Manager shall have the right to suspend or terminate operation of the spectrum user's system. The spectrum user agreement must stipulate that if the spectrum user refuses to comply with a suspension or termination order, the Band Manager will be free to use all legal means necessary to enforce the order.

(g) The spectrum user agreement may not impose unduly restrictive requirements on use of the licensed frequencies, including any requirement that is not reasonably related to the efficient management of the spectrum licensed to the Band Manager.

(h) Band Managers shall maintain their written agreements with spectrum users at their principal place of business, and retain such records for at least two years after the date such agreements expire. Such records shall be kept current and be made available upon request for inspection by the Commission or its representatives.

§ 27.1004 Access to the Band Manager's spectrum.

(a) A Band Manager may not engage in unjust or unreasonable discrimination among spectrum users and may not unreasonably deny prospective spectrum users access to the Band Manager's licensed spectrum.

(b) A Band Manager may not impose unduly restrictive requirements on use of its licensed frequencies, including any requirement that is not reasonably related to the efficient management of the spectrum licensed to the Band Manager.

14. Part 90 of title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 90 – PRIVATE LAND MOBILE RADIO SERVICE

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

AUTHORITY: Sections 4(i), 11, 303(g), 303(r), and 302(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7), unless otherwise noted.

16. Section 90.175 proposed to be revised by amending paragraph (i)(13) to read as follows:

§ 90.175 Frequency coordination requirements.

* * * * *

(i) * * * *

(13) Applications for frequencies in the 1429.5-1432 MHz band.

17. Section 90.259 is proposed to be revised by amending paragraph (b) to read as follows:

§ 90.259 Assignment and use of frequencies in the bands 216-220 MHz and 1427-1432 MHz.

* * * * *

(b) 1427-1432 MHz band.

(1) Frequencies in the 1427-1432 MHz band may be assigned to applicants that establish eligibility in the Public Safety Pool or the Industrial/Business Pool.

(2) All operations in the 1427-1429.5 MHz band are secondary to the Wireless Medical Telemetry Service except in the locations specified in paragraph (b)(4) of this section where operations are primary in status.

(3) All operations in the 1429.5-1432 MHz are primary in status except in the locations specified in paragraph (b)(4) of this section where operations are secondary to the Wireless Medical Telemetry Service.

(4) Locations:

(i) Pittsburgh, Pennsylvania – Westmoreland, Washington, Beaver, Allegheny and Butler counties;

(ii) Washington, DC metropolitan area – Montgomery, Prince William, Fairfax, Prince George's and Charles counties, Alexandria City, District of Columbia;

(iii) Richmond/Norfolk, Virginia – Goochland, Powhatan, Hanover, Henrico counties, Richmond City, Hampton City, Virginia Beach City, Chesapeake City, Portsmouth City and Suffolk City;

(iv) Austin/Georgetown, Texas – Williamson and Travis counties;

(v) Battle Creek, Michigan – Calhoun county

(vi) Detroit, Michigan – Oakland county

(vii) Spokane, Washington – Spokane county.

(5) All operations in the 1429.5-1432 MHz band authorized prior to [Effective date of the *Reallocation Report and Order*] are on a secondary basis.

18. We propose to add a new Subpart to Part 90 as follows:

Subpart Y - Competitive Bidding Procedures for Primary Telemetry in the 1427-1432 MHz band.

§ 90.1201 1.4 GHz primary telemetry licenses subject to competitive bidding.

Mutually exclusive initial applications for 1.4 GHz primary telemetry licenses in the 1427-1432 MHz band are subject to competitive bidding. The general competitive bidding procedures set forth in Part 1, Subpart Q of this chapter will apply unless otherwise provided in this part.

§ 90.1202 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 annual 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 annual gross revenues not exceeding \$15 million for the preceding three years.

(3) 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.

(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.

19. Part 95 of title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 95 – PERSONAL RADIO SERVICES

20. The authority citation for Part 95 continues to read as follows:

AUTHORITY: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303.

21. Section 95.630 is proposed to be amended as follows:

§ 95.630 WMTS transmitter frequencies.

(a) WMTS transmitters may operate in the frequency bands specified below:

608-614 MHz

1395-1400 MHz

1427-1429.5 MHz, except at the locations specified in paragraph (b)

1429.5- 1432 MHz, only at the locations specified in paragraph (b)

(b) Locations:

(1) Pittsburgh, Pennsylvania – Westmoreland, Washington, Beaver, Allegheny and Butler counties;

(2) Washington, DC metropolitan area – Montgomery, Prince William, Fairfax, Prince George’s and Charles counties, Alexandria City, District of Columbia;

(3) Richmond/Norfolk, Virginia – Goochland, Powhatan, Hanover, Henrico counties, Richmond City, Hampton City, Virginia Beach City, Chesapeake City, Portsmouth City and Suffolk City;

(4) Austin/Georgetown, Texas – Williamson and Travis counties;

(5) Battle Creek, Michigan – Calhoun county

(6) Detroit, Michigan – Oakland county

(7) Spokane, Washington – Spokane county.

22. Section 95.639(g) is proposed to be amended as follows:

§ 95.639 Maximum transmitter power.

* * * * *

(g) The maximum field strength authorized for WMTS stations in the 608-614 MHz band is 200 mV/m, measured at 3 meters. For stations in the 1395-1400 MHz, 1427-1429.5 MHz, and 1429.5-1432 MHz bands, the maximum field strength is 740 mV/m, measured at 3 meters.

23. Section 95.1101 is proposed to be amended as follows:

§ 95.1101 Scope.

This part sets out the regulations governing the operation of Wireless Medical Telemetry Devices in the 608-614 MHz, 1395-1400 MHz, 1427-1429.5 MHz and 1429.5-1432 MHz frequency bands.

24. Section 95.1103(c) is proposed to be amended as follows:

§ 95.1103 Definitions.

* * * * *

(c) Wireless medical telemetry. The measurement and recording of physiological parameters and other patient-related information via radiated bi- or unidirectional electromagnetic signals in the 608-614 MHz, 1395-1400 MHz, 1427-1429.5 MHz, and 1429.5-1432 MHz frequency bands.

25. Sections 95.1115(a)(2) and 95.1115(d)(1) are proposed to be amended as follows:

§ 95.1115 General technical requirements.

(a) * * *

(2) In the 1395-1400 MHz, 1427-1429.5 MHz, and 1429.5-1432 MHz bands, the maximum allowable field strength is 740 mV/m, as measured at a distance of 3 meters, using measuring equipment with an averaging detector and a 1 MHz measurement bandwidth.

* * * * *

(d) Channel use. (1) In the 1395-1400 MHz, 1427-1429.5 MHz, and 1429.5-1432 MHz bands, no specific channels are specified. Wireless medical telemetry devices may operate on any channel within the bands authorized for wireless medical telemetry use in this part.

26. Section 95.1121 is proposed to be amended as follows:

§ 95.1121 Specific requirements for wireless medical telemetry devices operating in the 1395-1400 MHz, 1427-1429.5 MHz, and 1429.5-1432 MHz bands.

Due to the critical nature of communications transmitted under this part, the frequency coordinator in consultation with the National Telecommunications and Information Administration shall determine whether there are any Federal Government systems whose operations could affect, or could be affected by, proposed wireless medical telemetry operations in the 1395-1400 MHz 1427-1429.5 MHz, and 1429.5-1432 MHz bands. The locations of government systems in these bands are specified in footnotes US351 and US352 of § 2.106 of this chapter.

**SEPARATE STATEMENT OF
COMMISSIONER KATHLEEN ABERNATHY**

In re: Reallocation of 216-220 MHz, 1427-1430 MHz, 1430-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands (WT Docket No. 02-08).

In the allocation and service rule decisions in this docket the Commission has made important spectrum management decisions that will provide valuable new services to the American people. I write separately to applaud three key aspects of today's order: (1) diverse and flexible spectrum policy, (2) creative domestic policy sensitive to global considerations, and (3) support and due consideration for private parties' compromise solutions to public policy issues.

First, the Commission proposes to license two 5 MHz unpaired blocks of spectrum on a nationwide basis. As the marketplace and technology evolve, the Commission will be increasingly called upon to license spectrum in innovative and non-traditional ways. The days of always seeking to auction 10 MHz paired blocks are over. Instead a diversity of technologies (i.e. ArrayComm's TDD and AeroAstro's satellite enabled notification system) and applications (i.e. Microtrax personal location system) require diverse allocation and service rule decisions. This is particularly true while the transaction costs of spectrum deals in the secondary market remain so high. These high costs increase the importance of diversity and flexibility in our initial allocation and service rules. Today's items advance the Commission's goals in this regard, while underscoring the importance of our secondary markets proceeding to the long-term health of our spectrum management policy.

Second, our items provide for a contingent allocation for Little Leo satellite services in the 1.4 GHz band. While it is not typical for the Commission to allocate spectrum on a contingent basis, failure to provide for such a contingency would have unfairly foreclosed the Little Leo community's ability to succeed at the World Radio Conference in 2003. Once again, the increasingly complex and global spectrum management landscape has required us to adapt and respond creatively – our contingent allocation evidences this capability.

Finally, the Commission today takes an important step towards meeting the needs of the utility and medical telemetry communities by tentatively concluding that their compromise proposal will guide our consideration of the 1427-1432 MHz band. Although we will obviously await a full record and careful consideration of this issue, the compromise advanced by the parties should be applauded. The medical and utility telemetry communities privately crafted a solution that advances each of their interests – a job often better done by the parties than by government. There is no question that mutual resolution of their private interests greatly assists the Commission in assessing the broader public interest. I look forward to working with all the parties and my colleagues to take advantage of the significant opportunities presented by these bands – and continuing to craft an evolving spectrum policy that maximizes those opportunities.