PUBLIC NOTICE

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COMMSSION STAFF REQUESTS THAT INTERESTED PARTIES SUPPLEMENT THE RECORD ON DRAFT INTERFERENCE RULES FOR WIRELESS COMMUNICATIONS SERVICE AND SATELLITE DIGITAL AUDIO RADIO SERVICE

WT Docket No. 07-293
IB Docket No. 95-91, GEN Docket No. 90-357, RM No. 8610

Comments Date: April 16, 2010

For the reasons stated below, the Office of Engineering and Technology, the International Bureau and the Wireless Telecommunications Bureau hereby request that interested parties comment on draft interference rules for the Wireless Communications Service and Satellite Digital Audio Radio Service.

On December 17, 2007, the Commission adopted a Notice of Proposed Rulemaking and Second Further Notice of Proposed Rulemaking in WT Docket No. 07-293 and IB Docket No. 95-91, respectively, inviting comment on proposals for mobile operations in the Wireless Communications Service (WCS) and on establishing rules for terrestrial repeaters operating in the Satellite Digital Audio Radio Service (SDARS).[1] Since that time, the Commission has developed an extensive record in this proceeding, including comments, replies, more than 75 *ex parte* meetings and over 180 *ex parte* filings, joint meetings among the various interested parties, and tests conducted in an open process. FCC technical staff has advised the interested parties of the technical requirements they plan to recommend to the Commission, which has led to the filing of further detailed comments from the parties. The specific draft technical rules under consideration by the staff are attached to this Public Notice for comment.[2]

The interested parties in this proceeding, namely the WCS Coalition, Sirius XM Radio Inc. (Sirius XM), and the Aerospace and Flight Test Radio Coordinating Council (AFTRCC), have had strongly differing views as to appropriate interference protection standards. In developing the draft rules the FCC staff considered all of the information that has been submitted in the record.

The draft rules include numerous provisions to minimize the risk of harmful interference to SDARS from mobile WCS operations. For example, the draft rules would create a guard band of 2.5 megahertz on

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[1] *See* Amendment of Part 27 of the Commission's Rules to Govern the Operation of Wireless Communications Services in the 2.3 GHz Band and Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, *Notice of Proposed Rulemaking and Second Further Notice of Proposed Rulemaking*, WT Docket No. 07-293 and IB Docket No. 95-91, 22 FCC Rcd 22123 (2007).

[2] In issuing the Notice of Proposed Rulemaking and Second Further Notice of Proposed Rulemaking, the Commission satisfied its notice and comment obligations as required by the Administrative Procedure Act. However, in order to promote transparency and encourage maximum public participation, we are providing an additional opportunity for public comment.

each side of the SDARS spectrum in which mobile operations would not be permitted, resulting in a buffer between the two services. WCS out-of-band emissions would be reduced in steps to a level less than that of nearly any other mobile devices. The draft rules also place caps on the peak-to-average power ratio (PAPR) and duty cycle of the WCS transmitters. Furthermore, the draft rules also provide that, irrespective of compliance with the technical standards, if WCS operations cause harmful interference to the SDARS, WCS licensees have an obligation to correct such harmful interference.

SDARS terrestrial repeaters have the potential to cause harmful interference to WCS mobile operations. They have been deployed since 2001 under grants of special temporary authority. The draft rules would codify technical and licensing provisions for SDARS terrestrial repeaters. The draft rules also address concerns raised by the National Association of Broadcasters (NAB) about the use of terrestrial repeaters to originate local programming other than that provided by the satellite network directly to SDARS subscribers. Blanket licensing is allowed for SDARS terrestrial repeaters that comply with the draft rules under a single earth station license similar to the licensing regime in place for Very Small Aperture Terminal (VSAT) satellite earth station networks. Terrestrial repeaters that do not comply with the draft rules, however, would be subject to site-by-site licensing.

AFTRCC represents the interests of the aeronautical mobile telemetry service that operates in spectrum above and adjacent to the WCS band. AFTRCC and others have raised concerns that WCS mobile operations would interfere with reception of distant signals from aircraft undergoing flight tests and accordingly pose a safety risk. The draft rules, in addition to stringent limits on emissions into the aeronautical telemetry band, would require coordination in areas near to aeronautical telemetry receiver sites.

The draft rules do not adopt any party's proposal in full. However, the staff believes that the proposed rules take a fair and balanced approach to facilitating mobile broadband operations in WCS band spectrum, which is largely unused today, while providing reasonable protection against harmful interference to incumbent services.

FCC staff presented the substance of the proposed rules to the WCS Coalition and Sirius XM in a joint meeting held at the Commission on March 2, 2010. Both parties subsequently submitted detailed *ex parte* filings with various comments. Based on staff's analysis of the parties' filings, the draft rules have been adjusted to take into account the additional information contained in those filings.

The issues in this proceeding have been considered and discussed thoroughly among all of the interested parties over many years. Nevertheless, in the interest of complete transparency, we are providing an opportunity for public comment on the text of the draft rules, which is attached to this Public Notice.

Comments are due by April 16, 2010. Interested parties may file comments addressing these issues on or before this date. *See* 47 U.S.C. § 154(i); 47 C.F.R. §§ 0.191(e), and 0.392. All comment filings should reference the subject public notice and **WT Docket No. 07-293** and **IB Docket No. 95-91**. Comments may be filed by using (1) the Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) by filing paper copies. *See* Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).

§ Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://www.fcc.gov/cgb/ecfs or the Federal eRulemaking Portal: http://www.regulations.gov. Filers should follow the instructions provided on the website for submitting comments.

§ For ECFS filers, in completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an

e-mail to ecfs@fcc.gov and include the following words in the body of the message: "get form." A sample form and directions will be sent in response.

§ Paper Filers: Parties who choose to file by paper must file an original and four copies of each filing.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although the Commission continues to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to: Secretary, Office of the Secretary, Federal Communications Commission.

§ All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

§ Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

§ U.S. Postal Service first-class, Express, and Priority mail should be addressed to 445 12th Street, SW, Washington, D.C. 20554.

§ People with Disabilities: To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

All filings must be addressed to the Commission's Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, 445 12th Street, SW, Washington, D.C. 20554. Parties must also serve one copy with the Commission's copy contractor, Best Copy and Printing, Inc. (BCPI), Portals II, 445 12th Street, SW, Room CY-B402, Washington, D.C. 20554, (202) 488-5300, or via e-mail to fcc@bcpiweb.com.

Documents in **WT Docket No. 07-293** and **IB Docket No. 95-91** are available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, 445 12th St. SW, Room CY-A257, Washington, D.C. 20554. The documents may also be purchased from BCPI, telephone (202) 488-5300, facsimile (202) 488-5563, TTY (202) 488-5562, e-mail fcc@bcpiweb.com.

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APPENDIX A

Proposed Rules

Part 25 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 25 – SATELLITE COMMUNICATIONS

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

Authority: 47 U.S.C. 701-744. Interprets or applies Sections 4, 301, 302, 303, 307, 309, and 332 of the Communications Act, as amended, 47 U.S.C. Sections 154, 301, 302, 303, 307, 309, 332, unless otherwise noted.

2. Amend Section 25.121 by revising paragraph (a) to read as follows:

§ 25.121 License term and renewals.

(a) License Term. (1) Except for licenses for DBS space stations, SDARS space stations and terrestrial repeaters, and 17/24 GHz BSS space stations licensed as broadcast facilities, licenses for facilities governed by this part will be issued for a period of 15 years.

(2) Licenses for DBS space stations and 17/24 GHz BSS space stations licensed as broadcast facilities, and for SDARS space stations and terrestrial repeaters, will be issued for a period of 8 years. Licenses for DBS space stations not licensed as broadcast facilities will be issued for a period of 10 years.

* * * * *

3. Amend Section 25.144 by revising paragraph (d) and adding paragraph (e), to read as follows:

§ 25.144 Licensing provisions for the 2.3 GHz satellite digital audio radio service.

* * * * *

(d) The license term for each digital audio radio service satellite and any associated terrestrial repeaters are specified in § 25.121 of this chapter.

(e) SDARS Terrestrial Repeaters.

(1) Only entities holding or controlling SDARS space station licenses may construct and operate SDARS terrestrial repeaters and only if at least one SDARS space station is authorized and transmitting directly to subscribers.

(2) SDARS terrestrial repeaters will be eligible for blanket licensing only under the following circumstances:

(i) The SDARS terrestrial repeaters will comply with all applicable power limits set forth in § 25.214(d)(1) of this chapter and all applicable out-of-band emission limits set forth in § 25.202(h)(1) and (2) of this chapter.

(ii) The SDARS terrestrial repeaters will meet all applicable requirements in part 1, subpart I, and part 17 of this chapter. Operators of SDARS terrestrial repeaters must maintain demonstrations of compliance with part 1, subpart I, of this chapter and make such demonstrations available to the Commission upon request within three business days.

(iii) The SDARS terrestrial repeaters will comply with all requirements of all applicable international agreements.

(3) After **[Insert release date of Order],** SDARS licensees shall, before deploying any new, or modifying any existing, terrestrial repeater, notify potentially affected WCS licensees pursuant to the procedure set forth in § 25.263 of this chapter.

(4) SDARS terrestrial repeaters are restricted to the simultaneous retransmission of the complete programming, and only that programming, transmitted by the SDARS licensee's satellite(s) directly to the SDARS licensee's subscribers' receivers, and may not be used to distribute any information not also transmitted to all subscribers' receivers.

(5) Operators of SDARS terrestrial repeaters are prohibited from using those repeaters to retransmit different transmissions from a satellite to different regions within that satellite's coverage area.

(6) Operators of SDARS terrestrial repeaters are required to comply with all applicable provisions of part 1, subpart I, and part 17 of this chapter.

(7)(i) Each SDARS terrestrial repeater transmitter utilized for operation under this paragraph must be of a type that has been authorized by the Commission under its certification procedure.

(ii) In addition to the procedures set forth in subpart J of part 2 of this chapter, power measurements for SDARS repeater transmitters may be made in accordance with a Commission-approved average power technique. Peak-to-average power ratio (PAPR) measurements for SDARS repeater transmitters should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that the PAPR will not exceed 13 dB for more than 0.1 percent of the time or another Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

(iii) Any manufacturer of radio transmitting equipment to be used in these services may request equipment authorization following the procedures set forth in subpart J of part 2 of this chapter. Equipment authorization for an individual transmitter may be requested by an applicant for a station authorization by following the procedures set forth in part 2 of this chapter.

(8) Applications for blanket authority to operate terrestrial repeaters must be filed using Form 312, except that Schedule B to Form 312 need not be filed. Such applications must also include the following information as an attachment:

(i) The space station(s) with which the terrestrial repeaters will communicate, the frequencies and emission designators of such communications, and the frequencies and emission designators used by the repeaters to re-transmit the received signals.

(ii) The maximum number of terrestrial repeaters that will be deployed under the authorization at 1) power levels equal to or less than 2-watt average EIRP, and 2) power levels greater than 2-watt average EIRP (up to 12-kW average EIRP).

(iii) A certification of compliance with the requirements of § 25.144(e)(1) through (7) of this chapter.

(9) SDARS terrestrial repeaters that are ineligible for blanket licensing must be authorized on a site-by-site basis. Applications for site-by-site authorization must be filed using Form 312, except that

Schedule B need not be provided. Such applications must also include the following information, as an attachment:

(i) The technical information for each repeater required to be shared with potentially affected WCS licensees as part of the notification requirement set forth in § 26.263(c)(2) of this chapter.

(ii) The space station(s) with which the terrestrial repeaters will communicate, the frequencies and emission designators of such communications, and the frequencies and emission designators used by the repeaters to re-transmit the received signals.

4. Amend Section 25.202 by adding paragraph (a)(10), revising the introductory language of paragraph (f), and adding paragraph (h), to read as follows:

§ 25.202 Frequencies, frequency tolerance, and emission limitations.

(a) * * *
(10) The following frequencies are available for use by the Satellite Digital Audio Radio Service (SDARS), and for any associated terrestrial repeaters:

2320-2345 MHz (space-to-Earth)

* * * * *

(f) Emission limitations. Except for SDARS terrestrial repeaters, the mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the schedule set forth in paragraphs (f)(1) through (f)(4) of this section. The out-of-band emissions of SDARS terrestrial repeaters shall be attenuated in accordance with the schedule set forth in paragraph (h) of this section.

* * * * *

(h) Out-of-band emission limitations for SDARS terrestrial repeaters.

(1) Any SDARS terrestrial repeater operating at a power level greater than 2-watt average EIRP is required to attenuate its out-of-band emissions by (90 + 10*log (P) dB) in a 1-megahertz bandwidth outside the 2320-2345 MHz band, where P is average transmitter output power in watts.

(2) Any SDARS terrestrial repeater operating at a power level equal to or less than 2-watt average EIRP is required to attenuate its out-of-band emissions by (75 + 10*log (P) dB) in a 1-megahertz bandwidth outside the 2320-2345 MHz band, where P is average transmitter power in watts.

(3) SDARS repeaters are permitted to attenuate out-of-band emissions less than the levels specified in paragraphs (1) and (2) above, unless a potentially affected WCS licensee provides written notice that it intends to commence commercial service within the following 365 days. Starting 180 days after receipt of such written notice, SDARS repeaters within the area notified by the potentially affected WCS licensee must attenuate out-of-band emissions to the levels specified in paragraphs (1) and (2) above.

(4) For the purpose of this section, a WCS licensee is potentially affected if it meets any of the following criteria:

(i) The WCS licensee is authorized to operate a base station in the 2305-2315 MHz or 2350-2360 MHz bands in the same Major Economic Area (MEA) as that in which a SDARS terrestrial repeater is located.

(ii) The WCS licensee is authorized to operate a base station in the 2315-2320 MHz or 2345-2350 MHz bands in the same Regional Economic Area Grouping (REAG) as that in which a SDARS terrestrial repeater is located.

(iii) A SDARS terrestrial repeater is located within 5 kilometers of the boundary of an MEA or REAG in which the WCS licensee is authorized to operate a WCS base station.

5. Amend Section 25.214 by revising the title and adding paragraph (d) to read as follows:

§ 25.214 Technical requirements for space stations in the satellite digital audio radio service and associated terrestrial repeaters.

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(d) Power limit for SDARS terrestrial repeaters.

(1) SDARS terrestrial repeaters must be operated at a power level less than or equal to 12-kW average EIRP, with a maximum peak-to-average power ratio of 13 dB.

(2) SDARS repeaters are permitted to operate at power levels above 12-kW average EIRP, unless a potentially affected WCS licensee provides written notice that it intends to commence commercial service within the following 365 days. Starting 180 days after receipt of such written notice, SDARS repeaters within the area notified by the potentially affected WCS licensee must be operated at a power level less than or equal to 12-kW average EIRP, with a maximum peak-to-average power ratio of 13 dB.

(3) For the purpose of this section, a WCS licensee is potentially affected if it meets any of the following criteria:

(i) The WCS licensee is authorized to operate a base station in the 2305-2315 MHz or 2350-2360 MHz bands in the same Major Economic Area (MEA) as that in which a SDARS terrestrial repeater is located.

(ii) The WCS licensee is authorized to operate a base station in the 2315-2320 MHz or 2345-2350 MHz bands in the same Regional Economic Area Grouping (REAG) as that in which a SDARS terrestrial repeater is located.

(iii) A SDARS terrestrial repeater is located within 5 kilometers of the boundary of an MEA or REAG in which the WCS licensee is authorized to operate a WCS base station.

6. Add Section 25.263 to read as follows:

§ 25.263 Information sharing requirements for SDARS terrestrial repeater operators.

This section requires SDARS licensees in the 2320-2345 MHz band to share information regarding the location and operation of terrestrial repeaters with WCS licensees in the 2305-2320 MHz and 2345-2360 MHz bands. Section 27.72 of this chapter requires WCS licensees to share information regarding the location and operation of base stations in the 2305-2320 MHz and 2345-2360 MHz bands with SDARS licensees in the 2320-2345 MHz band.

(a) SDARS licensees must select terrestrial repeater sites and frequencies, to the extent practicable, to minimize the possibility of harmful interference to WCS base station operations in the 2305-2320 MHz and 2345-2360 MHz bands.

(b) Prior Notice Periods. SDARS licensees that intend to operate a new terrestrial repeater must, before commencing such operation, provide 10 business days prior notice to all potentially affected WCS licensees. SDARS licensees that intend to modify an existing repeater must, before commencing such modified operation, provide 5 business days prior notice to all potentially affected WCS licensees.

(1) For purposes of this section, a "potentially affected WCS licensee" is a WCS licensee that: (i) is authorized to operate a base station in the 2305-2315 MHz or 2350-2360 MHz bands in the same Major Economic Area (MEA) as that in which the terrestrial repeater is to be located; (ii) is authorized to operate a base station in the 2315-2320 MHz or 2345-2350 MHz bands in the same Regional Economic Area Grouping (REAG) as that in which the terrestrial repeater is to be located. (iii) In addition to the WCS licensees identified in paragraphs (b)(1)(i) and (ii) of this section, in cases in which the SDARS licensee plans to deploy or modify a terrestrial repeater within 5 kilometers of the boundary of an MEA or REAG in which the terrestrial repeater is to be located, a potentially affected WCS licensee is one that is authorized to operate a WCS base station in that neighboring MEA or REAG within 5 kilometers of the location of the terrestrial repeater.

(2) For the purposes of this section, a business day is defined by § 1.4(e)(2) of this chapter.

(c) Notification Requirements.

(1) Notification must be written (*e.g.*, certified letter, fax, or email) and include the licensee's name, and the name, address, and telephone number of its coordination representative, unless the SDARS licensee and all potentially affected WCS licensees reach a mutual agreement to provide notification by some other means. WCS licensees and SDARS licensees may establish such a mutually agreeable alternative notification mechanism without prior Commission approval, provided that they comply with all other requirements of this section.

(2) Regardless of the notification method, it must specify relevant technical details, including, at a minimum: (i) the coordinates of the proposed repeater to an accuracy of no less than ± 1 second latitude and longitude; (ii) the proposed operating power(s), frequency band(s), and emission(s); (iii) the antenna center height above ground and ground elevation above mean sea level, both to an accuracy of no less than ±1 meter; (iv) the antenna gain pattern(s) in the azimuth and elevation planes that include the peak of the main beam; and (v) the antenna downtilt angle(s).

(3) An SDARS licensee operating terrestrial repeaters must maintain an accurate and up-to-date inventory of their terrestrial repeaters operating above 2 watts average EIRP, including the information set forth in § 25.263(c)(2) of this chapter, which shall be available upon request by the Commission.

(d) Calculation of Notice Period. Notice periods are calculated from the date of receipt by the licensee being notified. If notification is by mail, the date of receipt is evidenced by the return receipt on certified mail. If notification is by fax, the date of receipt is evidenced by the notifying party's fax transmission confirmation log. If notification is by email, the date of receipt is evidenced by a return e-mail receipt. If the SDARS licensee and all potentially affected WCS licensees reach a mutual agreement to provide notification by some other means, that agreement must specify the method for determining the beginning of the notice period.

(e) Duty to Cooperate. SDARS licensees must cooperate in good faith in the selection and use of new repeater sites to reduce interference and make the most effective use of the authorized facilities. Licensees of stations suffering or causing harmful interference must cooperate in good faith and resolve such problems by mutually satisfactory arrangements. If the licensees are unable to do so, the International Bureau, in consultation with the Office of Engineering and Technology and the Wireless Telecommunications Bureau, may impose restrictions including specifying the transmitter power, antenna height, or area or hours of operation of the stations.

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

PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

1. 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.

2. Amend Section 27.50 by revising paragraph (a) to read as follows:

§ 27.50 Power limits and duty cycle.

(a) The following power limits and related requirements apply to stations transmitting in the 2305-2320 MHz band or the 2345-2360 MHz band.

(1) Base and fixed stations.

(i) For base and fixed stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band:

(A) The average equivalent isotropically radiated power (EIRP) must not exceed 2,000 watts within any 5 megahertz of authorized bandwidth and must not exceed 400 watts within any 1 megahertz of authorized bandwidth.

(B) The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

(ii) For base and fixed stations transmitting in the 2315-2320 MHz band or the 2345-2350 MHz band, the peak EIRP must not exceed 2,000 watts.

(iii) Base and fixed stations using frequency division duplex (FDD) technology are restricted to transmitting in the 2345-2360 MHz bands.

(2) Fixed customer premises equipment. For fixed customer premises equipment (CPE) transmitting in the 2305-2320 MHz band or the 2345-2360 MHz band, the peak EIRP must not exceed 20 watts.

(3) Mobile and portable stations.

(i) For mobile and portable stations transmitting in the 2305-2317.5 MHz band or the 2347.5-2360 MHz band, the average EIRP must not exceed 250 milliwatts. For mobile and portable stations using time division duplex (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2317.5 MHz and 2347.5-2360 MHz bands. For mobile and portable stations using frequency division duplex (FDD) technology, the duty cycle must not exceed 12.5 percent in the 2305-2317.5 MHz band. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2317.5 MHz band. Power averaging shall not include intervals in which the transmitter is off.

(ii) Mobile and portable stations are not permitted to operate in the 2317.5-2320 MHz and 2345-2347.5 MHz bands.

(iii) Automatic transmit power control. Mobile and portable stations transmitting in the 2305-2317.5 MHz band or in the 2347.5-2360 MHz band must utilize automatic transmit power control when operating so the station operates with the minimum power necessary for successful communications.

(iv) Prohibition on external vehicle-mounted antennas. The use of external vehicle-mounted antennas for mobile and portable stations transmitting in the 2305-2317.5 MHz band or the 2347.5-2360 MHz band is prohibited.

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3. Amend Section 27.53 by revising paragraphs (a)(1), (a)(2), and (a)(3), removing and reserving paragraphs (a)(5) and (a)(9), and revising paragraph (a)(10) to read as follows:

§ 27.53 Emission limits.

(a) For operations in the 2305-2320 MHz band and the 2345-2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) (with averaging performed only during periods of transmission) within the licensed band(s) of operation, in watts, by the following amounts:

(1) For base and fixed stations. By a factor of not less than (43 + 10*log (P) dB) on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band of operation, not less than (75 + 10*log (P) dB) on all frequencies between 2320 and 2345 MHz, not less than (43 + 10*log (P) dB) at 2305 and 2360 MHz, not less than (55 + 10*log (P) dB) at 2362.5 MHz, not less than (70 + 10*log (P) dB) at 2300 and 2365 MHz, not less than (72 + 10*log (P) dB) at 2367.5 MHz, and not less than (75 + 10*log (P) dB) at 2370 MHz.

(2) For fixed customer premises equipment.

(i) For fixed customer premises equipment (CPE) transmitting with more than 2 watts average EIRP, by a factor of not less than (43 + 10*log (P) dB) on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band of operation, not less than (75 + 10*log (P) dB) on all frequencies between 2320 and 2345 MHz, not less than (43 + 10*log (P) dB) at 2305 and 2360 MHz, not less than (55 + 10*log (P) dB) at 2362.5 MHz, not less than (70 + 10*log (P) dB) at 2300 and 2365 MHz, not less than (72 + 10*log (P) dB) at 2367.5 MHz, and not less than (75 + 10*log (P) dB) at 2370 MHz.

(ii) For fixed CPE transmitting with 2 watts average EIRP or less, by a factor of not less than (43 + 10*log (P) dB) on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band of operation, not less than (55 + 10*log (P) dB) on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than (61 + 10*log (P) dB) on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, not less than (67 + 10*log (P) dB) on all frequencies between 2328 and 2337 MHz, not less than (43 + 10*log (P) dB) at 2305 and 2360 MHz, not less than (45 + 10*log (P) dB) at 2362.5 MHz, not less than (55 + 10*log (P) dB) at 2365 MHz, not less than (65 + 10*log(P) dB) at 2367.5 MHz, and not less than (70 + 10*log (P) dB) at 2300 and 2370 MHz.

(3) For mobile and portable stations. For mobile and portable stations operating in the 2305-2317.5 MHz and 2347.5-2360 MHz bands, by a factor of not less than (43 + 10*log (P) dB) on all frequencies between 2305 and 2317.5 MHz and on all frequencies between 2347.5 and 2360 MHz that are outside the licensed band of operation, not less than (55 + 10*log (P) dB) on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than (61 + 10*log (P) dB) on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, not less than (67 + 10*log (P) dB) on all frequencies between 2328 and 2337 MHz, not less than (43 + 10*log (P) dB) at 2305 and 2360 MHz,

not less than (45 + 10*log (P) dB) at 2362.5 MHz, not less than (55 + 10*log (P) dB) at 2365 MHz, not less than (65 + 10*log(P) dB) at 2367.5 MHz, and not less than (70 + 10*log (P) dB) at 2300 and 2370 MHz.

* * * * *

(5) Reserved.

* * * * *

(9) Reserved.

(10) The out-of-band emissions limits in paragraphs (a)(1) through (a)(3) of this section may be modified by the private contractual agreement of all affected licensees, who must maintain a copy of the agreement in their station files and disclose it to prospective assignees, transferees, or spectrum lessees and, upon request, to the Commission.

* * * * *

4. Add Section 27.72 to read as follows:

§ 27.72 Information sharing requirements.

This section requires WCS licensees in the 2305-2320 MHz and 2345-2360 MHz bands to share information regarding the location and operation of base stations with Satellite Digital Audio Radio Service (SDARS) licensees in the 2320-2345 MHz band. Section 25.263 of this chapter requires SDARS licensees in the 2320-2345 MHz band to share information regarding the location and operation of terrestrial repeaters with WCS licensees in the 2305-2320 MHz and 2345-2360 MHz bands.

(a) WCS licensees must select base station sites and frequencies, to the extent practicable, to minimize the possibility of harmful interference to operations in the SDARS 2320-2345 MHz band.

(b) Prior Notice Periods. WCS licensees that intend to operate a base station must, before commencing such operation, provide 10 business days prior notice to all SDARS licensees. WCS licensees that intend to modify an existing base station must, before commencing such modified operation, provide 5 business days prior notice to all SDARS licensees. For the purposes of this section, a business day is defined by § 1.4(e)(2) of this chapter.

(c) Notification Requirements.

(1) Notification must be written (*e.g.*, certified letter, fax, or email) and include the licensee's name, and the name, address, and telephone number of its coordination representative, unless the SDARS licensee and all potentially affected WCS licensees reach a mutual agreement to provide notification by some other means. WCS licensees and SDARS licensees may establish such a mutually agreeable alternative notification mechanism without prior Commission approval, provided that they comply with all other requirements of this section.

(2) Regardless of the notification method, it must specify relevant technical details, including, at a minimum: (i) the coordinates of the proposed base station to an accuracy of no less than ± 1 second latitude and longitude; (ii) the proposed operating power(s), frequency band(s), and emission(s); (iii) the antenna center height above ground and ground elevation above mean sea level, both to an accuracy of no less than ±1 meter; (iv) the antenna gain pattern(s) in the azimuth and elevation planes that include the peak of the main beam; and (v) the antenna downtilt angle(s).

(3) A WCS licensee operating base stations must maintain an accurate and up-to-date inventory of its base stations, including the information set forth in § 27.72(c)(2) of this chapter, which shall be available upon request by the Commission.

(d) Calculation of Notice Period. Notice periods are calculated from the date of receipt by the licensee being notified. If notification is by mail, the date of receipt is evidenced by the return receipt on certified mail. If notification is by fax, the date of receipt is evidenced by the notifying party's fax transmission confirmation log. If notification is by email, the date of receipt is evidenced by a return e-mail receipt. If the SDARS licensee and all potentially affected WCS licensees reach a mutual agreement to provide notification by some other means, that agreement must specify the method for determining the beginning of the notice period.

(e) Duty to Cooperate. WCS licensees must cooperate in good faith in the selection and use of new station sites and new frequencies to reduce interference and make the most effective use of the authorized facilities. Licensees of stations suffering or causing harmful interference must cooperate in good faith and resolve such problems by mutually satisfactory arrangements. If the licensees are unable to do so, the Wireless Telecommunications Bureau, in consultation with the Office of Engineering and Technology and the International Bureau, may impose restrictions including specifying the transmitter power, antenna height, or area or hours of operation of the stations.

5. Add Section 27.73 to read as follows:

§ 27.73 WCS and MAT coordination requirements.

This section requires Wireless Communications Services (WCS) licensees in the 2345-2360 MHz band to coordinate the deployment of base stations with Mobile Aeronautical Telemetry (MAT) facilities in the 2360-2395 MHz band; and to take all practicable steps necessary to reduce the likelihood of harmful interference to MAT facilities.

(a) Wireless Communications Service (WCS) licensees operating base stations in the 2345-2360 MHz band shall, prior to operation of such base stations, achieve a mutually satisfactory coordination agreement with any MAT entity operating an MAT receiver facility within 45 kilometers or the radio line of site, whichever distance is larger, of the intended WCS base station location. The location of MAT receiver sites may be obtained from the Aerospace and Flight Test Radio Coordinating Council (AFTRCC) for non-federal MAT receivers. For federal MAT receivers, the WCS licensee shall supply sufficient information to the Commission to allow coordination to take place. A listing of current MAT receiver sites can be obtained from AFTRCC for non-federal sites and through the FCC's IRAC Liaison for federal MAT receiver sites.

(b) Duty to Cooperate. WCS licensees and MAT receiver operators must cooperate in good faith in the coordination and deployment of WCS and MAT facilities. WCS licensees must also cooperate in good faith in the selection and use of new station sites and new frequencies when within radio line of site of MAT receiver facilities to reduce the likelihood of harmful interference and make the most effective use of the authorized facilities. Licensees of stations suffering or causing harmful interference must cooperate in good faith and resolve such problems by mutually satisfactory arrangements. If the licensees are unable to do so, the Wireless Telecommunications Bureau, in consultation with the Office of Engineering and Technology and the National Telecommunications and Information Administration may impose restrictions including specifying the transmitter power, antenna height, or area or hours of operation of the stations.