

Federal Communications Commission

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Amendment of Part 27 of the Commission’s Rules)
to Govern the Operation of Wireless) WT Docket No. 07-293
Communications Services in the 2.3 GHz Band)
)
Establishment of Rules and Policies for the) IB Docket No. 95-91
Digital Audio Radio Satellite Service in the) GEN Docket No. 90-357
2310-2360 MHz Frequency Band) RM-8610

SECOND ERRATUM

Released: July 14, 2010

By the Chief, Office of Engineering and Technology:

On May 20, 2010, the Commission released a Report and Order and Second Report and Order, FCC 10-82, in the above captioned proceedings, in which we established rules that modified the technical parameters governing the operation of Wireless Communications Service (WCS) mobile and portable devices in the 2.3 GHz band, and adopted technical rules governing the operation of 2.3 GHz band Satellite Digital Audio Radio Service (SDARS) terrestrial repeaters and a blanket-licensing regime for SDARS repeaters. This Second Erratum corrects the document as indicated below:

1. In paragraph 103, we correct an error in the last sentence by replacing the phrase “mobile satellite service (MSS)” with the phrase “direct broadcast satellite (DBS) service,” to read as follows:

“As an initial matter, however, although Dr. Rappaport characterizes Sirius XM’s service as a broadcast service, we believe that their service is more akin to a subscription-based direct broadcast satellite (DBS) service offering.”

2. In footnote 315, to clearly reflect that the discussion is just an illustrative example, we correct the first sentence by replacing the phrase “we establish, for reference purposes only,” with the phrase “we illustrate,” to read as follows. (We also correct a typographical error by changing “a” before SDARS to “an”).

“Based on the mobile receiver overload parameters (-44 dBm in the WCS A and B blocks, and -55 dBm in the WCS C and D blocks) submitted by Sirius (Sirius Comments, Exhibit C.) and the WCS Coalition (WCS Coalition Comments at 15), we illustrate a horizontal separation needed to protect an SDARS receiver from overload interference from a WCS base station.”

3. In footnote 315, to reflect that the assumed base station EIRP of 8 kW (2 kW per 1.25 megahertz-wide emissions, with 4 carriers in a 5-megahertz block) is based on the peak base station EIRP allowed under Section 27.50(a)(1) prior to adoption of the Report and Order and Second Report and Order, we correct the second sentence by adding the phrase “as currently allowed under Section 27.50(a)(1),” after the parenthetical phrase “(2 kW per 1.25 megahertz-wide emissions, with 4 carriers in a 5-megahertz block),” to read as follows:

“Based on a WCS base station height of 30 meters (approximate height for cellular-type architectures), with a peak EIRP of 8 kW (2 kW per 1.25 megahertz-wide emissions, with 4 carriers in a 5-megahertz block), as currently allowed under Section 27.50(a)(1), an SDARS

receiver overload level of -55 dBm, an SDARS receiver height of 1.5 meters, flat terrain, and an empirical path loss model suitable for an urban area under these conditions, namely COST-231 Hata Model, the separation distance for the WCS C or D block would be 347 meters.”

4. In footnote 315, to correct errors in the discussion, in the first sentence, we replace the phrase “protect an SDARS receiver from overload interference” with the phrase “avoid overload interference caused to an SDARS receiver;” in the second sentence, we replace the phrase “Based on” with the word “Assuming” and add the phrase “if the current peak power limit for the WCS C and D blocks were to be retained;” and we remove the third sentence, to read as follows (also incorporating the corrections noted above):

“Based on the mobile receiver overload parameters (-44 dBm in the WCS A and B blocks, and -55 dBm in the WCS C and D blocks) submitted by Sirius (Sirius Comments, Exhibit C.) and the WCS Coalition (WCS Coalition Comments at 15), we illustrate a horizontal separation needed to avoid overload interference caused to an SDARS receiver from a WCS base station. Assuming a WCS base station height of 30 meters (approximate height for cellular-type architectures), with peak EIRP of 8 kW (2 kW per 1.25 megahertz-wide emissions, with 4 carriers in a 5 megahertz block), as currently allowed under Section 27.50(a)(1), an SDARS receiver overload level of -55dBm, an SDARS receiver height of 1.5 meters, flat terrain, and an empirical path loss model suitable for an urban area under these conditions, namely COST-231 Hata Model, the separation distance for the WCS C or D block would be 347 meters if the current peak power limit for the WCS C and D blocks were to be retained. Using the -44 dBm overload threshold agreed upon by the parties for the A and B blocks, we find that permitting an average EIRP of 2 kW over a 5-megahertz bandwidth (or 400 W/MHz) in the WCS A and B blocks will result in a separation distance of less than 347 meters.”

5. In paragraphs 140-143, the final rule text in Sections 27.50(a)(2), 27.53(a)(2), and 27.53(a)(3) in Appendix B, and paragraphs 8-10 and 34 of the Final Regulatory Flexibility Analysis (FRFA) in Appendix C, to express the 20-W peak or 2-W operating EIRP for WCS CPE using the same methodology that was used to specify the allowed average and/or peak EIRP for WCS base, fixed, mobile, and portable stations, we correct the following. (As appropriate, we also correct the out-of-band emissions (OOBE) listed (as discussed below in paragraph 6 for the FRFA) so they agree with the OOBE limits adopted in Section 27.53, and correct typographical errors.)

1) the third sentence of paragraph 140 by adding the phrase “per 5-megahertz” after “20 watts,” to read as follows:

“Thus, we decide that we should adopt the current mobile transmitter power limit of 20 watts per 5-megahertz peak EIRP for WCS fixed CPE devices.³³³”

2) the fifth sentence of paragraph 140 by adding the phrase “per 5-megahertz” after “2-W,” and by making the word “factor” plural, to read as follows:

“For fixed customer premises equipment (CPE) transmitting with more than 2-W per 5-megahertz average EIRP, we also decide to adopt the OOBE attenuation factors that we are adopting for WCS base stations of not less than $43 + 10 \log (P)$ dB on all frequencies between 2305-2320 MHz and on all frequencies between 2345-2360 MHz that are outside the licensed band of operation, and not less than $75 + 10 \log (P)$ dB on all frequencies between 2320 and 2345 MHz.”

3) the sixth sentence of paragraph 140 by correcting the OOBE listed to agree with those adopted in Section 27.53(a)(2), to read as follows:

“These WCS CPE’s OOB must also be attenuated by a factor of not less than $43 + 10 \log P$ dB at 2305 and 2360 MHz, $55 + 10 \log P$ dB at 2362.5 MHz, $70 + 10 \log P$ dB at 2300 and 2365 MHz, $72 + 10 \log P$ dB at 2287.5 and 2367.5 MHz, and $75 + 10 \log P$ dB below 2285 MHz and above 2370 MHz.”

4) the third and fourth sentences of paragraph 141 by adding the phrase “per 5-megahertz” after “20 W,” to read as follows:

“We expect that if we were to continue to allow WCS fixed CPE devices to use up to 20 W per 5-megahertz peak EIRP, SDARS operations would not experience any appreciable increase in interference from these WCS operations. Moreover, continuing to allow WCS fixed CPE devices to use up to 20 W per 5-megahertz peak EIRP will enhance the provision and quality of service in rural areas, where subscribers are often located significant distances from WCS licensees’ serving base stations.”

5) the third, fifth, and sixth sentences of paragraph 142 by adding the phrase “per 5-megahertz” after 2-W and 2 W, respectively, to read as follows:

“The increased propagation losses that result from these factors allow for greater flexibility in establishing technical limits for WCS fixed CPE devices operating at or below 2-W per 5-megahertz average EIRP. ... Specifically, for fixed CPE transmitting with 2-W per 5-megahertz average EIRP or less, OOB emissions must be attenuated by a factor of $43 + 10 \log (P)$ dB on all frequencies between 2305-2320 MHz and on all frequencies between 2345-2360 MHz that are outside the licensed band of operation, not less than $55 + 10 \log (P)$ dB in the 2320-2324/2341-2345 MHz bands, not less than $61 + 10 \log (P)$ dB in the 2324-2328/2337-2341 MHz bands, not less than $67 + 10 \log (P)$ dB in the 2328-2337 MHz band, where P is the transmitter output power in Watts. To protect DSN operations at 2290-2300 MHz and AMT operations at 2360-2395 MHz, OOB of CPE transmitting at 2 W per 5-megahertz average EIRP or less must be attenuated by a factor of not less than $43 + 10 \log (P)$ dB 2305 and 2360 MHz, not less than $55 + 10 \log (P)$ dB at 2300 MHz band, not less than $61 + 10 \log (P)$ dB at 2296 MHz band, not less than $67 + 10 \log (P)$ dB at 2292 MHz, and not less than $70 + 10 \log (P)$ dB below 2288 MHz and above 2365 MHz.”

6) the third through sixth sentences of paragraph 143 by adding the phrase “per 5-megahertz” after “2-W” and “2 W,” to read as follows:

“In addition, the SDARS licensees recognize that WCS fixed CPE devices operating at or below 2 W per 5-megahertz average EIRP do not require the same safeguards against interference to SDARS operations as fixed stations transmitting at higher power levels.³³⁸ As we have concluded *supra* that the stepped OOB attenuation factors for WCS mobile and portable devices will provide sufficient protection to SDARS operations, we conclude that WCS CPE operating at 2 W per 5-megahertz average EIRP or less with these same attenuation factors will provide SDARS operations sufficient protection from harmful interference. Thus, we find that it is appropriate to adopt the stepped OOB attenuation factors for WCS fixed CPE operating at 2-W per 5-megahertz average EIRP or less that we are adopting for WCS mobile and portable devices. To further limit the potential for harmful interference from WCS CPE to SDARS receivers, however, we restrict WCS CPE devices operating at 2 Watts per 5-megahertz or less average EIRP to the use of indoor antennas and indoor installations.”

7) the final rule text of Section 27.50(a)(2) in Appendix B by adding the phrase “per 5-megahertz” after the phrase “20 watts” in the first sentence, and after the phrase “2 watts” in the third sentence, to read as follows:

“(2) Fixed customer premises equipment stations. For fixed customer premises equipment (CPE) stations transmitting in the 2305-2320 MHz band or in the 2345-2360 MHz band, the peak EIRP must not exceed 20 watts per 5-megahertz. Fixed CPE stations transmitting in the 2305-2320 MHz band or in the 2345-2360 MHz band must employ automatic transmit power control when operating so the stations operate with the minimum power necessary for successful communications. The use of outdoor antennas for CPE stations or outdoor CPE station installations operating with 2 watts per 5-megahertz or less average EIRP is prohibited. For WCS CPE using TDD technology, the duty cycle must not exceed 38 percent; for WCS CPE using FDD technology, the duty cycle must not exceed 12.5 percent in the 2315-2320 MHz band, and must not exceed 25 percent in the 2305-2315 MHz band.”

8) the final rule text of Section 27.53(a)(2) in Appendix B by adding the phrase “per 5-megahertz” after “2 watts,” to read as follows:

“(2) For fixed customer premises equipment (CPE) stations operating in the 2305-2320 MHz band and the 2345-2360 MHz band transmitting with more than 2 watts per 5-megahertz average EIRP:”

9) the final rule text of Section 27.53(a)(3) in Appendix B by adding the phrase “per 5-megahertz” after “2 watts,” to read as follows:

“(3) For fixed CPE stations transmitting with 2 watts per 5-megahertz average EIRP or less:”

10) the first and third sentences of paragraph 8 of the FRFA in Appendix C by adding the phrase “per 5-megahertz” after “20 W,” to read as follows:

“In the *Report and Order*, the Commission maintains the current mobile transmitter power limit of 20 W per 5-megahertz peak EIRP for WCS fixed CPE devices. The Commission notes that there have not been any significant reports of interference to SDARS operations resulting from currently authorized equipment, and does not expect SDARS operations to experience any appreciable increase in interference from these WCS operations if the current limit is retained. Moreover, the Commission believes that continuing to allow WCS fixed CPE devices to use up to 20 W per 5-megahertz EIRP will enhance the provision and quality of service in rural areas, where subscribers are often located significant distances from WCS licensees’ serving base stations.”

11) the first sentence of paragraph 9 of the FRFA in Appendix C by adding the phrase “per 5-megahertz” after “2 Watts,” to read as follows:

“Additionally, the Commission adopts, for WCS fixed CPE devices operating above 2 Watts per 5-megahertz average transmit power, an OOB attenuation factor, as measured over a 1-megahertz resolution bandwidth, 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 in the 2320-2345 MHz band, 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 2300 and 2365 MHz, not less than $72 + 10 \log (P)$ dB at 2287.5 and 2367.5 MHz, and not less than $75 + 10 \log (P)$ dB below 2285 MHz and above 2370 MHz.”

12) the first sentence of paragraph 10 of the FRFA in Appendix C by adding the phrase “per 5-megahertz” after “2 W,” to read as follows:

“For lower power CPE devices operating at or below 2 W per 5-megahertz average EIRP, the Commission further relaxes the OOB attenuation levels measured over a 1-megahertz resolution bandwidth to the levels it adopts for mobile devices: not less than $43 + 10 \log (P)$ dB in the 2305-2320 MHz and 2345-2360 MHz bands on frequencies that are outside the licensed band of operation, not less than $55 + 10 \log (P)$ dB in the 2320-2324 MHz and 2341-2345 MHz bands, not less than $61 + 10 \log (P)$ dB in the 2324-2328 MHz and 2337-2341 MHz bands, not less than $67 + 10 \log (P)$ dB in the 2328-2337 MHz band, not less than $43 + 10 \log (P)$ dB at 2305 and 2360 MHz, not less than $55 + 10 \log (P)$ dB at 2300 MHz, not less than $61 + 10 \log (P)$ dB at 2296 MHz, not less than $67 + 10 \log (P)$ dB at 2292 MHz, and not less than $70 + 10 \log (P)$ dB below 2288 MHz and above 2365 MHz.”

13) the first, second, and third sentences of paragraph 34 of the FRFA in Appendix C by adding the phrase “per 5-megahertz” after “20 W” and “2 W,” respectively, to read as follows:

“The Commission finds it appropriate to maintain the current mobile transmitter power limit of 20 W per 5-megahertz peak EIRP for WCS fixed CPE devices because it appears that the existing limit has not resulted in interference to SDARS operation and also provides WCS licensees with operational flexibility. Also, for WCS CPE operating with an EIRP above 2 W per 5-megahertz, the Commission adopts the $75 + 10 \log (P)$ dB OOB attenuation factor for frequencies in the 2320-2345 MHz band, noting that both SDARS and WCS licensees propose that limit, and SDARS licensees have indicated that they are amenable to a lowering of the OOB limit because WCS fixed CPE device operations pose less risk of interference and disruption to SDARS licensees. Further, in light of the Commission’s finding that applying the stepped OOB limits to WCS mobile and portable devices will provide sufficient protection to SDARS operations, as well as the lower likelihood of interference to SDARS receivers posed by WCS fixed CPE terminals operating at or below 2 Watts per 5-megahertz, the Commission finds it appropriate to adopt the stepped OOB limit that is applicable to WCS mobile devices (*i.e.*, $43 + 10 \log (P)$ dB in the 2305-2317.5 MHz band on frequencies that are outside the licensed band of operation, $55 + 10 \log (P)$ dB in the 2320-2324 MHz/2341-2345 MHz bands, $61 + 10 \log (P)$ dB in the 2324-2328 MHz/ 2337-2341 MHz bands, and $67 + 10 \log (P)$ dB in the 2328-2337 MHz band, and not less than not less than $43 + 10 \log (P)$ dB at 2305 and 2360 MHz, $55 + 10 \log (P)$ dB at 2300 MHz, $61 + 10 \log (P)$ dB at 2296 MHz, $67 + 10 \log (P)$ dB at 2292 MHz, and $70 + 10 \log (P)$ dB below 2288 MHz and above 2365 MHz) for these WCS CPE as well.”

6. In paragraphs 5, 7, 9, 10, 26, 30, 32, and 34 of the FRFA in Appendix C, to correct the OOB limits listed for WCS mobile, portable, base, fixed, and CPE stations to agree with the limits adopted in Sections 27.53(a)(1)-(4), respectively, we correct:

1) the last sentence of paragraph 5 of the FRFA by replacing the phrase “ $43 + 10 \log (P)$ 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 or below 2300 MHz and at or above 2370 MHz” with the phrase “ $43 + 10 \log (P)$ dB at 2305 and 2360 MHz, not less than $55 + 10 \log (P)$ dB at 2300 MHz, not less than $61 + 10 \log (P)$ dB at 2296 MHz, not less than $67 + 10 \log (P)$ dB at 2292 MHz, and not less than $70 + 10 \log (P)$ dB below 2288 MHz and above 2365 MHz,” to read as follows:

“To limit the potential for interference to Deep Space Network (DSN) operations in the 2290-2300 MHz band and Aeronautical Mobile Telemetry (AMT) operations in the 2360-2395 MHz band, WCS mobile and portable devices OOB must be attenuated by a factor of not less than $43 + 10 \log (P)$ dB at 2305 and 2360 MHz, not less than $55 + 10 \log (P)$ dB at 2300 MHz, not less than $61 + 10 \log (P)$ dB at 2296 MHz, not less than $67 + 10 \log (P)$ dB at 2292 MHz, and not less than $70 + 10 \log (P)$ dB below 2288 MHz and above 2365 MHz.”

2) the last sentence of paragraph 7 of the FRFA by replacing the phrase “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 or below 2300 MHz and at 2365 MHz, not less than 72 + 10 log (P) dB at 2367.5 MHz, and not less than 75 + 10 log (P) dB at or above 2370 MHz” with the phrase “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 2287.5 and 2367.5 MHz, and not less than 75 + 10 log (P) dB below 2285 MHz and above 2370 MHz,” to read as follows:

“In addition, to protect DSN operations in the 2290-2300 MHz band and AMT operations in the 2360-2395 MHz band, WCS base and fixed stations’ OOB must be attenuated by a factor of 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 2287.5 and 2367.5 MHz, and not less than 75 + 10 log (P) dB below 2285 MHz and above 2370 MHz.”

3) the first sentence of paragraph 9 of the FRFA by replacing the phrase “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 or below 2300 MHz and at 2365 MHz, not less than 72 + 10 log (P) dB at 2367.5 MHz, and not less than 75 + 10 log (P) dB at or above 2370 MHz” with the phrase “not less than 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and between 2345 and 2360 MHz that are outside the licensed band of operation, 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 2287.5 and 2367.5 MHz, and not less than 75 + 10 log (P) dB below 2285 MHz and above 2370 MHz,” to read as follows:

“Additionally, the Commission adopts, for WCS fixed CPE devices operating above 2 Watts per 5-megahertz average transmit power, an OOB attenuation factor of not less than 75 + 10 log (P) dB, as measured over a 1-megahertz resolution bandwidth, on frequencies in the 2320-2345 MHz band, not less than 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and between 2345 and 2360 MHz that are outside the licensed band of operation, 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 2287.5 and 2367.5 MHz, and not less than 75 + 10 log (P) dB below 2285 MHz and above 2370 MHz.”

4) the first sentence of paragraph 10 of the FRFA by replacing the phrase “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 or below 2300 MHz and at or above 2370 MHz” with the phrase “not less than 43 + 10 log (P) dB at 2305 and 2360 MHz, not less than 55 + 10 log (P) dB at 2300 MHz, not less than 61 + 10 log (P) dB at 2296 MHz, not less than 67 + 10 log (P) dB at 2292 MHz band, and not less than 70 + 10 log (P) dB below 2288 MHz and above 2365 MHz,” to read as follows:

“For lower power CPE devices operating at or below 2 W per 5- megahertz average EIRP, the Commission further relaxes the OOB attenuation levels measured over a 1-megahertz resolution bandwidth to the levels it adopts for mobile devices: not less than 43 + 10 log (P) dB in the 2305-2320 MHz and 2345-2360 MHz bands on frequencies that are outside the licensed band of operation, not less than 55 + 10 log (P) dB in the 2320-2324 MHz and 2341-2345 MHz bands, not less than 61 + 10 log (P) dB in the 2324-2328 MHz and 2337-2341 MHz bands, not less than

67 + 10 log (P) dB in the 2328-2337 MHz band, not less than 43 + 10 log (P) dB at 2305 and 2360 MHz, not less than 55 + 10 log (P) dB at 2300 MHz, not less than 61 + 10 log (P) dB at 2296 MHz, not less than 67 + 10 log (P) dB at 2292 MHz, and not less than 70 + 10 log (P) dB below 2288 MHz and above 2365 MHz.”

5) the second sentence of paragraph 26 of the FRFA by replacing the phrase “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” with the phrase “not less than 43 + 10 log (P) dB at 2305 and 2360 MHz, not less than 55 + 10 log (P) dB at 2300 MHz, not less than 61 + 10 log (P) dB at 2296 MHz, not less than 67 + 10 log (P) dB at 2292 MHz, and not less than 70 + 10 log (P) dB below 2288 and above 2365 MHz,” to read as follows:

“In addition, mobile and portable devices’ OOB E must be attenuated by a factor of not less than 43 + 10 log (P) dB at 2305 and 2360 MHz, not less than 55 + 10 log (P) dB at 2300 MHz, not less than 61 + 10 log (P) dB at 2296 MHz, not less than 67 + 10 log (P) dB at 2292 MHz, and not less than 70 + 10 log (P) dB below 2288 and above 2365 MHz.”

6) the first sentence of paragraph 30 of the FRFA by replacing the phrase “not less than 43 + 10 log (P) dB at 2305 and 2360 MHz, 45 + 10 log (P) dB at 2362.5 MHz, 55 + 10 log (P) dB at 2365 MHz, 65 + 10 log (P) dB at 2367.5 MHz, and 70 + 10 log (P) dB at 2300 and 2370 MHz” with the phrase “43 + 10 log (P) dB at 2305 and 2360 MHz, not less than 55 + 10 log (P) dB at 2300 MHz, not less than 61 + 10 log (P) dB at 2296 MHz, not less than 67 + 10 log (P) dB at 2292 MHz, and not less than 70 + 10 log (P) dB below 2288 and above 2365 MHz,” to read as follows:

“The Commission expects that both approaches, combined with the 250 mW average EIRP limit for WCS mobile and portable devices and the related OOB E attenuation factors of not less than 43 + 10 log (P) dB in the 2305-2317.5 MHz band on frequencies that are outside the licensed band of operation, not less than 55 + 10 log (P) dB in the 2320-2324 MHz/2341-2345 MHz bands, 61 + 10 log (P) dB in the 2324-2328 MHz/ 2337-2341 MHz bands, and 67 + 10 log (P) dB in the 2328-2337 MHz band, and 43 + 10 log (P) dB at 2305 and 2360 MHz, not less than 55 + 10 log (P) dB at 2300 MHz, not less than 61 + 10 log (P) dB at 2296 MHz, not less than 67 + 10 log (P) dB at 2292 MHz, and not less than 70 + 10 log (P) dB below 2288 and above 2365 MHz should provide the technical flexibility for WCS licensees to deploy mobile service, and thereby avoid the adverse economic impact to WCS licensees, including small entities, that would occur without the ability to provide such service.”

7) the last sentence of paragraph 32 of the FRFA, by replacing the phrase “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” with the phrase “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 2287.5 and 2367.5 MHz, and not less than 75 + 10 log (P) dB below 2285 MHz and above 2370 MHz,” to read as follows:

“To protect DSN and AMT operations, we find it is the public interest to adopt an OOB E attenuation factor of 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 2287.5 and 2367.5 MHz, and not less than 75 + 10 log (P) dB below 2285 MHz and above 2370 MHz.”

8) the last sentence of paragraph 34 of the FRFA, by replacing the phrase “not less than 43 + 10 log (P) dB at 2305 and 2360 MHz, 45 + 10 log (P) dB at 2362.5 MHz, 55 + 10 log (P) dB at 2365 MHz, 65 + 10*log (P) dB at 2367.5 MHz, and 70 + 10 log (P) dB at or below 2300 MHz and at or above 2370 MHz for these WCS CPE as well” with the phrase “not less than 43 + 10 log (P) dB at 2305 and 2360 MHz, 55 + 10 log (P) dB at 2300 MHz, 61 + 10 log (P) dB at 2296 MHz, 67 + 10 log (P) dB at 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz and above 2365 MHz for these WCS CPE as well,” to read as follows:

“Further, in light of the Commission’s finding that applying the stepped OOB limits to WCS mobile and portable devices will provide sufficient protection to SDARS operations, as well as the lower likelihood of interference to SDARS receivers posed by WCS fixed CPE terminals operating at or below 2 Watts per 5-megahertz, the Commission finds it appropriate to adopt the stepped OOB limit that is applicable to WCS mobile devices (*i.e.*, 43 + 10 log (P) dB in the 2305-2317.5 MHz band on frequencies that are outside the licensed band of operation, 55 + 10 log (P) dB in the 2320-2324 MHz/2341-2345 MHz bands, 61 + 10 log (P) dB in the 2324-2328 MHz/ 2337-2341 MHz bands, and 67 + 10 log (P) dB in the 2328-2337 MHz band, and not less than not less than 43 + 10 log (P) dB at 2305 and 2360 MHz, 55 + 10 log (P) dB at 2300 MHz, 61 + 10 log (P) dB at 2296 MHz, 67 + 10 log (P) dB at 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz and above 2365 MHz) for these WCS CPE as well.”

7. In the last sentence of paragraph 152, we correct a typographical error by replacing the word “arrive” with “arise,” to read as follows:

“Although we do not adopt these specific proposals in Part 25 or Part 27 of our Rules, we refer Commission staff to the comments for consideration in resolving interference issues as they arise.”

8. In the final rule text of Section 2.106 United States Footnote 338 (US338) in Appendix B, so the descriptive text associated with the “2305-2320 MHz” band is the same in all instances, we replace the phrase “frequency range” before the first instance of “2305-2320 MHz” with the word “band.” Also, to correct the term that describes the 2305-2310 MHz band to agree with the International Telecommunications Union’s terminology, we replace the word “band” in paragraph (a) with the word “sub-band.” To correct a typographical error in paragraph (b), we replace “N” after the longitude coordinates with “W,” to read as follows:

“For the reasons discussed above, the Federal Communications Commission amends Title 47 of the Code of Federal Regulations, Part 2, as follows:

Part 2 – Table of Frequency Allocations

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

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

2. Amend Section 2.106 US338 to read as follows:

US338 The following provisions shall apply in the band 2305-2320 MHz:

(a) In the sub-band 2305-2310 MHz, space-to-Earth operations are prohibited.

(b) Within 145 km of Goldstone, CA (35° 25' 33" N, 116° 53' 23" W), Wireless Communications

Federal Communications Commission

Service (WCS) licensees operating base stations in the band 2305-2320 MHz band shall, prior to operation of those base stations, achieve a mutually satisfactory coordination agreement with the National Aeronautics and Space Administration (NASA).

NOTE: NASA operates a deep space facility in Goldstone in the band 2290-2300 MHz.”

FEDERAL COMMUNICATIONS COMMISSION

Julius P. Knapp
Chief, Office of Engineering and Technology