

47 C.F.R. 25.204 WAIVER REQUEST

SATCOM Digital Networks, LLC requests waiver of Section 25.204 of the Commission's Rules. 47 C.F.R. §25.204. The Waiver is requested of subsection 25.204(f), which requires earth stations transmitting earth-to-space in the 13.75 - 14.00 GHz extended Ku-band frequency range to maintain 68 dBW Effective Isotropic Radiated Power ("EIRP") for any emission.¹ The Waiver is to permit transmission of emissions with EIRP levels below 68 dBW.

Pursuant to Section 1.3 of the Commission's Rules, the Commission may grant a waiver of the application of any of its rules "for good cause shown." 47 C.F.R. § 1.3. The Commission may waive a rule where the specific facts make strict compliance with the rule inconsistent with the public interest.² In addition, the Commission may take into account considerations of hardship.³ Thus, the Commission may waive its rules if special circumstances warrant such a waiver, and the waiver will serve the public interest.

The principal purpose for establishing the minimum 68 dBW EIRP level for fixed satellite services ("FSS") in the 13.75-14.00 GHz band was to ensure that FSS carriers would have sufficient signal strength to overcome interference in a crowded spectral environment.⁴ However, the Commission later clarified that "FSS licensees are aware of the interference environment in [the 13.75-14.00 GHz] band due to incumbent radiolocation operations and

¹ SATCOM's proposed operations otherwise satisfy all obligations specified in § 25.204.

² *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

³ *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969), cert. denied, 409 U.S. 1027 (1972); *Northeast Cellular*, 897 F.2d at 1166.

⁴ See Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range; Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2-12.7 GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates; and Applications of Broadwave USA, PDC Broadband Corporation, and Satellite Receivers, Ltd. to Provide A Fixed Service in the 12.2-12.7 GHz Band, *First Report and Order and Further Notice of Proposed Rulemaking*, 16 FCC Rcd 4096, at ¶¶ 141-147 (2000) ("NGSO/MVDS First R&O").

should be permitted to operate at lower powers if they can achieve communications.”⁵ The Commission has subsequently authorized earth stations to communicate with international space stations in the 13.75-14.00 GHz band with EIRP levels below 68 dBW.⁶

Allowing the flexibility to uplink carriers with EIRP levels below 68 dBW serves the public interest by protecting the co-primary government users of the band from interference and promotes spectral efficiency by enabling transmissions with reduced power levels for emissions that do not require 68 dBW. Given that 68 dBW of power is not necessary to uplink certain carriers, a reduction of EIRP will minimize the possibility of interference to United States Navy radar installations and National Aeronautics and Space Administration (“NASA”) Tracking and Data Relay Satellite System (“TDRSS”) sites. Moreover, reducing EIRP generally promotes the Commission’s longstanding goal of improving spectral efficiency by allowing uplink transmissions to the Amazonas-1 satellite network using only the necessary amount of power and not mandating earth-to-space transmissions with artificially elevated power levels that are more likely to interfere with other spectrum users. To the extent that interference from another spectrum user were to be experienced in the future, it is understood and accepted that FSS Ku-band earth-to-space transmissions in this band will only be entitled to the same interference protection rights available to a carrier uplinking with 68 dBW of EIRP.

In light of the good cause shown, SATCOM Digital Networks, LLC respectfully requests that the Commission grant its waiver request and approve the underlying application seeking authority to uplink to the Amazonas-1 in the 13.75-14.00 GHz band using a new earth station with EIRP levels below 68 dBW.

⁵ *Id.* at ¶ 144

⁶ *See, e.g.*, Globecom Systems, Inc. Application for Modification of Earth Station License, *Order on Reconsideration*, 20 FCC Rcd 8940 (2005).