

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington D.C. 20554**

In the Matter of

HISPAMAR SATELITES, S.A. (HISPAMAR)

Application to Modify Authorization for AMAZONAS-2
(S2793)

File No. SAT-MOD-

To: International Bureau

Petition

Hispamar Satélites, S.A. (“Hispamar”), pursuant to Section 25.117 of the rules of the Federal Communications Commission (“FCC” or “Commission”), hereby seeks to modify the authorization for the AMAZONAS-2 (Call Sign S2793). On October 15, 2009, the Commission authorized operation of AMAZONAS-2 a standard Ku-band satellite at the 61.0° W.L. orbital location. Since it was launched on October 1, 2009 and placed in orbit later on, AMAZONAS-2 has been operating according to the FCC granted applications¹. By this modification application, Hispamar seeks to update the Ku-band frequencies to include the frequency bands 12.75 – 13.75 / 10.7 – 10.95, 11.2 – 11.45 GHz band. All other information provided in the original application, as amended, remains unchanged.

In accordance with the requirements of the Commission’s rules,² this application has been filed electronically as an attachment to FCC Form 312. Hispamar provides the technical information relating to the proposed modification on Schedule S and in narrative form in the attached Engineering Statement.

OPERATIONAL FREQUENCIES

Hispamar seeks to update certain frequencies in the AMAZONAS-2 that have been commuted to operate over another part of the world different to North America. Specifically, the AMAZONAS-2 satellite will operate the new frequency bands specified below over the same beams contained in the original Hispamar applications¹.

New frequency bands:

- 12.75 – 13.25 GHz (Horizontal Polarization)
- 12.75 – 13.00 GHz (Vertical Polarization)
- 10.70 – 10.95 GHz and 11.2 – 11.45 GHz (Vertical Polarization)
- 10.70 – 10.95 GHz (Horizontal Polarization)

¹ See *Hispamar’s Applications for add AMAZONAS-2 Satellite in the Commission’s Permitted List*, File No. SAT-PPL-20090806-00081, SAT-PPL-20100506-00093 and SAT-APL-20101209-00257

² 47 C.F.R. § 25.117(b), (c).

These frequencies will operate under the following ITU filings submitted by the Administration of France:

- F-SAT-E-30B-61W: Appendix 30B Ku FSS planned bands

All other frequencies remain unchanged.

WAIVER REQUESTS

Hispamar requests that the Commission grant some waivers of this requirement pursuant to Section 1.3 of the Commission's rules:

- Hispamar requests waiver of Section 2.106 Footnote NG52, which permit the use of the 12750-13250 / 10700-11700 MHz frequency bands by non-federal fixed satellite service for international systems only³;

AMAZONAS-2 will utilize the 12750 – 13250 / 10700 – 10950 and 11200 – 11450 MHz frequency bands to provide service to U.S. territory and requests a waiver to allow use of these bands for domestic service use on a non-interference, non-protected basis.

Good cause for a waiver exists in this case. Grant of the requested waiver to permit domestic use of these frequencies would be consistent with some precedent⁴. As in those cases, grant of the requested waiver will make available additional domestic capacity without risk of harmful interference because AMAZONAS-2 will operate on a non-interference, non-protected basis.

Hispamar also agrees to abide by the customer notification requirements that the International Bureau has previously imposed when granting waivers of NG52.⁵ Hispamar will inform its customers in writing, including any customers receiving end-user services from resellers accessing capacity on AMAZONAS-2, of the potential for interference from FS operations in these bands.

- Hispamar requests a partial waiver of Part 25.210(f). Due to satellite design constrains, this satellite did not have enough capacity to be equipped with frequency reuse for some frequencies in some Ku band beams of the United States.
- It is also required that each application must also contain the formal waiver required by section 304 of the Communications Act, 47 U.S.C. 304. Such formal waiver is hereby formally requested.

³ 47 C.F.R. §2.106 footnote NG52

⁴ For example, see Policy Branch Information; Actions Taken, Report No. SAT-00796, File No. SAT LOA-20101014-00219 (July 29, 2011) (granting waiver of Footnote 2 of Section 25.202(a)(1) and Footnote NG104 of Section 2.106 for Intelsat 18)

⁵ See, e.g., *id.*; *Hispatat for Waiver*, Stamp Grant, File No. S SAT-PPL-20160722-00064, Condition 6.b (June. 04, 2017);

PUBLIC INTEREST SHOWING

Grant of this modification application to update the frequencies for AMAZONAS-2, as well as authorize use of the 12750-13250 / 10700 – 10950 , 11200 - 11450 MHz band in the United States, is in the public interest because it will enhance quality of service to consumers from the 61.0° W.L. orbital location. The modifications requested in this application will ensure the satellite is able to operate consistent with the capabilities of the spacecraft, thereby providing optimal service to customers and enabling Hispamar to further expand its service offerings in the region. This modification application therefore serves the public interest.

MILESTONE AND REQUIREMENTS

AMAZONAS-2 is already in operation at the requested orbital position and therefore not subject to the milestone and bond posting requirements set forth in Sections 25.164 and 25.165 of the Commission's rules.

CONCLUSION

Therefore, for the reasons set out above, Hispamar respectfully requests that the Commission issue a declaratory ruling permitting the use of the 12750 – 13250 / 10700 – 10950 and 11200 – 11450 MHz capacity on the AMAZONAS-2 satellite, granting this modification application.

Respectfully submitted,
Hispamar Satélites, S.A.

By: /s/
Cristina García de Miguel
Manager, Orbital-Spectrum Resources and Regulatory Affairs

TECHNICAL ANNEX

1. Introduction

This technical annex is submitted in support of the AMAZONAS-2 modification application, requesting the use of the 12750 – 13250 / 10700 – 10950 and 11200 – 11450 MHz bands capacity on the AMAZONAS-2 satellite. The satellite has been in operation at 61.0° W.L. orbital location since it was launched in 2009. The characteristics of these new requested frequency bands, as well as its compliance with the various provisions of Part 25 of the Federal Communications Commission’s (“FCC or “Commission”) rules, are provided in the remainder of this Technical Annex.

2. Spacecraft Overview

The AMAZONAS-2 characteristics are described in the original FCC applications⁶.

3. Antenna beams

The Schedule S online information is submitted as part of this filing. Beam contours and operational information are provided in the Schedule S information, however, it is worthy to note that the new requested frequency bands 12750 – 13250 / 10700 – 10950 and 11200 – 11450 MHz will operate under the same North American beams considered in the original FCC applications applications⁶ for the operation of 14000 - 14500 / 11700 – 12200 MHz band.

4. Regulatory considerations

4.1. Operations in the Ku Appendix 30B band

Interference Analysis and Certifications Pursuant to §25.140

With respect to proposed operation in the 10700-10950 MHz (space-to-Earth), 11200 - 11450 MHz (space-to-Earth), the proposed operation takes into account the applicable requirements of Appendix 30B of the ITU Radio Regulations. Further, compatibility with U.S. ITU filings under Appendix 30B is assured since there are no other existing U.S. ITU Filings under Appendix 30B within at least 10° of 61° W.L. When the Part A of F-SAT-E-30B-61W⁷ Appendix 30B satellite network was published⁸, only one U.S. satellite network was identified as potentially affected according to App.30B, Art.6, § 6.5 - Annex 4, however this satellite network has been suppressed⁹.

⁶ See *Hispamar’s Applications for add AMAZONAS-2 Satellite in the Commission’s Permitted List*, File No. SAT-PPL-20090806-00081, SAT-PPL-20100506-00093 and SAT-APL-20101209-00257

⁷ F-SAT-E-30B-61W is the ITU satellite network under which AMAZONAS-2 operates the Appendix 30B frequency bands.

⁸ See F-SAT-E-30B-61W AP30B/A6A 198 ITU special section published in BR IFIC 2713 on 21/02/2012

⁹ See USASAT 26G AP30B/A6A 198 ITU special section published in BR IFIC 2943 on 06/04/2021 confirming the suppression of the network.

The Commission's rules do not specify a PFD Limits in the 10.7 – 10.95 GHz and 11.2 – 11.45 GHz bands. However, there are PFD limits specified in rule No. 21.16 of the ITU Radio Regulations. AMAZONAS-2 will not exceed these limits.

The only authorized satellite in these frequency bands at $\pm 10^\circ$ of orbital separation from 61° W.L. is EUTELSAT 65 WEST A. The coordination with respect to this satellite was successfully concluded and AMAZONAS-2 will be operated in accordance to this agreement.

Regulatory considerations

Operations in the 10.7 – 10.95 GHz and 11.2 – 11.45 GHz frequency band shall comply with the terms of footnote US211 to the United States Table of Frequency Allocations, 47 C.F.R. §2.106, US211, which urges applicants for airborne or space station assignments to take all practicable steps to protect radio astronomy observations in the adjacent bands from harmful interference.

5. Emission Compliance

Section 25.202(e) requires that the carrier frequency of each space station transmitter be maintained within 0.002% of the reference frequency. AMAZONAS-2 is designed to be compliant with the provisions of this rule.

AMAZONAS-2 will comply with the provisions of Section 25.202(f) with regard to its emissions.