

Waiver Request

We request that the FCC waive¹ certain technical requirements of the following rulings:

- 47CFR25.209 Antenna Performance Standards
- 47CFR2.106 Table of Frequency Allocations
- Any other of the Commission's rules required to grant our application

Similar waivers have been requested by others².

Per 47CFR1.925:

"The Commission may grant a request for waiver if it is shown that:

(i) The underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest;

or

(ii) In view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative."

Public Interest

Broadband, small, on-the-move satellite earth stations are greatly needed by the US Army and US Marines for use in current national defense operations as well as the commercial sector. There are no such systems that have been granted a permanent license for operation in United States at this time.

In order to meet the size, weight, and communications performance objectives specified by the Government and Commerce, an antenna of a diameter less than one meter is required. Government and Commercial procurements of such systems both has occurred and is currently underway.

Granting the requested waivers would serve the public interest and would comply with the intent of the rulings.

¹ Per section 47 CFR 1.3 and 1.925 of the Commission's rules.

² Raysat, File Number: SES-LIC-20060629-01083, Call Sign E060101, also OmniTRACS

³ IMS450M Tech Brief filed with Experimental License 0440-EX-PL-2007

⁴ 47CFR25.212 Narrowband transmissions in the 12/14 GHz GSO Fixed-Satellite Service

Non-Compliance with 47CFR25.209 Antenna Performance Standards

The gain performance of an antenna diameter less than one meter in diameter is typically not compliant with 25.209. By managing the transmitted power spectral density³, we can comply with the off-axis or adjacent satellite emissions objectives bound by 47CFR25.209 and 47CFR 25.212⁴ (and ITU-R S.728-1).

Non-Compliance with 47CFR2.106 Table of Frequency Allocations

The table does not provide an allocation for MSS in the Ku-Band downlink frequencies (11.7 to 12.2 GHz). We request a wavier of Section 2.106 to permit the use of the 11.7 to 12.2 GHz downlink band for MSS.

Management of transmitted power spectral density including automatic shut-down mechanisms⁵ will ensure that operation of our system can be authorized without causing interference to other authorized users of the Ku-Band, including FSS users of the Ku Band downlink frequencies.

We will accept interference into our system from any authorized user of this band.

⁵ IMVS450M Technical Brief filed with Experimental License 0440-EX-PL-2007