



Recommendation ITU-R F.1570-2
(04/2010)

**Impact of uplink transmission in the fixed
service using high altitude platform stations
on the Earth exploration-satellite service
(passive) in the 31.3-31.8 GHz band**

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Fixed service



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Foreword

The role of the Radiocommunication Sector is to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including satellite services, and carry out studies without limit of frequency range on the basis of which Recommendations are adopted.

The regulatory and policy functions of the Radiocommunication Sector are performed by World and Regional Radiocommunication Conferences and Radiocommunication Assemblies supported by Study Groups.

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SA	Space applications and meteorology
SF	Frequency sharing and coordination between fixed-satellite and fixed service systems
SM	Spectrum management
SNG	Satellite news gathering
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Note: This ITU-R Recommendation was approved in English under the procedure detailed in Resolution ITU-R 1.

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RECOMMENDATION ITU-R F.1570-2*

Impact of uplink transmission in the fixed service using high altitude platform stations on the Earth exploration-satellite service (passive) in the 31.3-31.8 GHz band

(2002-2003-2010)

Scope

This Recommendation provides guidance on the interference evaluation method of high altitude platform stations (HAPS) uplink on the EESS (passive) in the 31.3-31.8 GHz band. Annex 1 provides considerations on a limit for the level of unwanted emissions of a transmitter at the input of a HAPS ground station antenna using the typical parameters for the HAPS system in the band 31-31.3 GHz given in Recommendation ITU-R F.1569.

The ITU Radiocommunication Assembly,

considering

- a) that new technology utilizing high altitude platform stations (HAPS) in the stratosphere is being developed;
- b) that the 31.3-31.8 GHz band is allocated to the radio astronomy, Earth exploration-satellite service (EESS) (passive) and space research service (passive), and it is necessary to appropriately protect these services from unwanted emissions from HAPS ground stations operated in the 31-31.3 GHz band, taking into account the interference criteria given in the relevant ITU-R Recommendations,

recognizing

- a) that the 27.9-28.2 GHz and 31-31.3 GHz bands may also be used for HAPS in the fixed service in certain countries on a non-interference, non-protection basis,

recommends

- 1** that § 1 in Annex 1 should be used for the parameters regarding EESS (passive) for the interference evaluation of HAPS uplink (ground-to-airship direction) on the EESS (passive) in the 31.3-31.8 GHz band;
- 2** that Recommendation ITU-R F.1569 should be used for the typical parameters regarding HAPS system for the impact evaluation of HAPS system on the EESS (passive) in the 31 GHz band;
- 3** that § 2 in Annex 1 should be used for the interference evaluation method of HAPS uplink on the EESS (passive) in the 31.3-31.8 GHz band.

* This Recommendation should be brought to the attention of Radiocommunication Study Group 7.