



Recommendation ITU-R M.2008-1
(02/2014)

**Characteristics and protection criteria for
radars operating in the aeronautical
radionavigation service in the frequency
band 13.25-13.40 GHz**

M Series
**Mobile, radiodetermination, amateur
and related satellite services**



International
Telecommunication
Union
Documents

Document Sharing Hub

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.

Policy on Intellectual Property Right (IPR)

ITU-R policy on IPR is described in the Common Patent Policy for ITU-T/ITU-R/ISO/IEC referenced in Annex 1 of Resolution ITU-R 1. Forms to be used for the submission of patent statements and licensing declarations by patent holders are available from <http://www.itu.int/ITU-R/go/patents/en> where the Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC and the ITU-R patent information database can also be found.

Series of ITU-R Recommendations

(Also available online at <http://www.itu.int/publ/R-REC/en>)

Series	Title
BO	Satellite delivery
BR	Recording for production, archival and play-out; film for television
BS	Broadcasting service (sound)
BT	Broadcasting service (television)
F	Fixed service
M	Mobile, radiodetermination, amateur and related satellite services
P	Radiowave propagation
RA	Radio astronomy
RS	Remote sensing systems
S	Fixed-satellite service
SA	Space applications and meteorology
SF	Frequency sharing and coordination between fixed-satellite and fixed service systems
SM	Spectrum management
SNG	Satellite news gathering
TF	Time signals and frequency standards emissions
V	Vocabulary and related subjects

Note: This ITU-R Recommendation was approved in English under the procedure detailed in Resolution ITU-R 1.

Electronic Publication
Geneva, 2014

© ITU 2014

All rights reserved. No part of this publication may be reproduced, by any means whatsoever, without written permission of ITU.

RECOMMENDATION ITU-R M.2008-1

Characteristics and protection criteria for radars operating in the aeronautical radionavigation service in the frequency band 13.25-13.40 GHz

(2012-2014)

Scope

This Recommendation specifies the characteristics and protection criteria of radars operating in the aeronautical radionavigation service (ARNS) in the frequency band 13.25-13.4 GHz. The technical and operational characteristics should be used in analysing compatibility between radars operating in the aeronautical radionavigation service and systems in other services.

Keywords

13.25-13.4 GHz, radar, characteristics, protection.

Abbreviations/Glossary

ARNS	Aeronautical radionavigation service
PSD	Power spectral density
UA	Unmanned aircraft
UAS	Unmanned aircraft system

The ITU Radiocommunication Assembly,

considering

- a) that antenna, signal propagation, target detection, and large necessary bandwidth of radar required to achieve their functions are optimum in certain frequency bands;
- b) that the technical characteristics of radars operating in the aeronautical radionavigation service (ARNS) are determined by the mission of the system and vary widely even within a frequency band,

recognizing

- a) that the frequency band 13.25-13.4 GHz is allocated on a primary basis to aeronautical radionavigation, Earth exploration-satellite (active), and space research (active) services;
- b) that the Earth exploration-satellite (active) and space research (active) services operating in the frequency band 13.25-13.4 GHz shall not cause harmful interference to, or constrain the use and development of, the ARNS;
- c) that representative technical and operational characteristics of systems operating in frequency bands allocated to the ARNS are required to determine the feasibility of introducing new types of systems;
- d) that procedures and methodologies are needed to analyse compatibility between radars operating in the ARNS and systems in other services,