



Recommendation ITU-R SA.2044
(12/2013)

**Protection criteria for non-GSO data
collection platforms
in the band 401-403 MHz**

SA Series
Space applications and meteorology



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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.

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.

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Series	Title
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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.

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RECOMMENDATION ITU-R SA.2044

**Protection criteria for non-GSO data collection platforms
in the band 401-403 MHz**

(Questions ITU-R 139/7 and ITU-R 141/7)

(2013)

Scope

This Recommendation provides information on the current and future usage of the non-GSO data collection systems (DCS) in the 401-403 MHz, and the portioning of the band to allow all DCS systems equal access to the spectrum.

The ITU Radiocommunication Assembly,

considering

- a) that system designers require performance objectives in the presence of interference for their systems;
- b) that performance objectives for representative systems operating in the EESS and MetSat services are intended to provide guidelines for the development of actual systems;
- c) that performance objectives for EESS and MetSat services are a prerequisite for conducting interference assessments;
- d) that protection criteria are required to meet the desirable performance objectives in the presence of interference,

recommends

- 1** that the analysis to determine the effect on non-GSO DCS systems in the 401-403 MHz should be based on the following protection criteria:
 - $-197.9 \text{ dB(W/(m}^2 \cdot \text{Hz))}$ maximum aggregate acceptable spectral power flux-density (spfd) at the antenna of a non-GSO DCS instrument for broadband noise interference (see Annex 1);
 - $-165.4 \text{ dB(W/m}^2\text{)}$ maximum power flux-density (pfd) within a resolution bandwidth of 19 Hz at the antenna of a non-GSO DCS instrument for each narrow-band spectral line interference (see Annex 2);
- 2** that protection criteria defined in *recommends 1* should not be exceeded for more than a percentage of 1% of time in the field of view of the satellite.