

ITU-R

Radiocommunication Sector of ITU

Recommendation ITU-R SM.1051-4
(09/2018)

**Priority of identifying and eliminating
harmful interference in the frequency
band 406-406.1 MHz and monitoring in the
adjacent frequency bands 405.9-406 MHz
and 406.1-406.2 MHz**

SM Series
Spectrum management



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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.

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.

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RECOMMENDATION ITU-R SM.1051-4

Priority of identifying and eliminating harmful interference in the frequency band 406-406.1 MHz and monitoring in the adjacent frequency bands 405.9-406 MHz and 406.1-406.2 MHz

(1994-1995-1997-2014-2018)

Scope

This Recommendation describes the priority that should be given to interference detected in the frequency band 406-406.1 MHz by Administrations and their monitoring authorities because interference impairs the detection and geolocation of actual distress beacons. Cospas-Sarsat is an international satellite-based search and rescue (SAR) distress alert system which detects and locates emergency beacons activated by aircraft, ships and backcountry hikers in distress worldwide. The Recommendation provides additional references to the ITU Monitoring programme for 406 MHz, as well as references to Report ITU-R SM.2258. Following the revision of Resolution **205 (Rev.WRC-15)**, this Recommendation provides a methodology to monitor the electromagnetic environment in the adjacent frequency bands 405.9-406 MHz and 406.1-406.2 MHz frequency bands.

Keywords

EPIRB; safety; Cospas-Sarsat; distress; beacon; interference

Abbreviations/Glossary

BR	Radiocommunication Bureau
EPIRB	Emergency position indicating radio beacon
GNSS	Global Navigation Satellite System
LEO	Low earth orbit
LUT	Local user terminal
MSS	Mobile-satellite service
WARC	World Administrative Radio Conference.

Related ITU Recommendations, Reports

Recommendation ITU-R M.633; Recommendation ITU-R M.1478; Report ITU-R SM.2258; Report ITU-R M.2359.

NOTE – In every case the latest edition of the Recommendation/Report in force should be used.

The ITU Radiocommunication Assembly,

considering

- a) that the band 406-406.1 MHz has been allocated in the Radio Regulations (RR) to the mobile-satellite (Earth-space) service for use by emergency position indicating radio beacons (EPIRBs) in cases of distress or emergency;
- b) that administrations may also authorize use of personal locator beacons, emergency locator transmitters, or equivalent systems, on a national basis using transmitter radiation parameters and characteristics similar to those of EPIRBs;
- c) that as part of the Global Maritime Distress and Safety System, the International Maritime Organization has required carriage of EPIRBs aboard ships operating under the Safety of Life at Sea Convention;