International Telecommunication Union

ITU-R
Radiocommunication Sector of ITU

Recommendation ITU-R F.2119-0
(01/2019)

Guidance on technical parameters and methodologies for sharing and compatibility studies related to fixed and land mobile services in the frequency range 1.5-30 MHz

F Series
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.

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 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 F.2119-0

Guidance on technical parameters and methodologies for sharing and compatibility studies related to fixed and land mobile services in the frequency range 1.5-30 MHz

(2019)

Scope

This Recommendation gives guidance to perform sharing studies related to systems in the fixed and land mobile services in the frequency range 1.5-30 MHz. It establishes a list of parameters, that characterize a system to assist in sharing studies, provides information on the methodologies that can be used for sharing analyses involving fixed and land mobile services in this frequency range. It also contains a list of relevant ITU-R Recommendations, Reports and Handbooks.

Related ITU Recommendations, Reports and Handbooks

See Annex 3.

Keywords

HF fixed and mobile service systems, sharing technical characteristics, protection criteria

Abbreviations/Glossary

AWGN	Additive white Gaussian noise
BER	Bit error ratio
FOT	Frequency of optimum transmission
HF	High frequency
I/*N*	Interference-to-noise ratio
MUF	Maximum usable frequency
SNIR	*S*/*(N+I)*, Signal-to-noise plus interference ratio
SNR	*S*/*N*, Signal-to-noise ratio
SSN	Smoothed sunspot number

The ITU Radiocommunication Assembly,

considering

that the technical characteristics of systems in the fixed and land mobile services in the frequency range 1.5-30 MHz can vary,

noting

the list of relevant Recommendations, Reports and Handbooks listed in Annex 3,

recommends

1 that the list of parameters in Annex 1 should be used as guidance on characteristics of systems in the fixed and land mobile services appropriate for use in sharing studies in the frequency range of 1.5-30 MHz;

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