



Recommendation ITU-R F.1520-4
(02/2023)

**Radio-frequency arrangements for systems
in the fixed service operating
in the band 31.8-33.4 GHz**

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.1520-4

**Radio-frequency arrangements for systems in the fixed service
operating in the band 31.8-33.4 GHz**

(Question ITU-R 247/5)

(2001-2002-2003-2011-2023)

Scope

This Recommendation specifies radio-frequency channel arrangements for fixed service systems with channel separation of 3.5, 7, 14, 28, 56, 112 and 224 MHz (including 56 MHz block arrangements) in the band 31.8-33.4 GHz which has been identified for use for high density applications in the fixed service (HDFS).

Keywords

Fixed service, point-to-point, channel bandwidth, channel arrangement, 32 GHz

Abbreviations

FDD	Frequency division duplex
FS	Fixed service
HDFS	High density applications in the fixed service
RF	Radio frequency
RNS	Radionavigation service
RR	Radio Regulations
TDD	Time division duplex

Related ITU Recommendations and Reports

Recommendation ITU-R F.746 – Radio-frequency arrangements for fixed service systems

Recommendation ITU-R F.1571 – Mitigation techniques for use in reducing the potential for interference between airborne stations in the radionavigation service and stations in the fixed service in the band 31.8-33.4 GHz

The ITU Radiocommunication Assembly,

considering

- a) that the band 31.8-33.4 GHz is allocated, among others, to the fixed service (FS) on a primary basis;
- b) that the 31.8-33.4 GHz band is available for high-density applications in the FS;
- c) that sharing in the 31.8-33.4 GHz band with radionavigation service (RNS), space research service (deep space, space-to-Earth) and inter-satellite service is considered to be feasible;
- d) that harmonized radio frequency (RF) arrangements can facilitate effective use of the spectrum;
- e) that several systems with various transmission signal characteristics and capacities may be in simultaneous use in this frequency band;
- f) that certain frequency block arrangements can be achieved by aggregating the frequency channels given in Annex 1;