

Radio Frequency Regulation 4

Background and legal basis of the regulation

The Regulation concerns the use of radio frequencies. Its objective is to guarantee a fair availability of radio frequencies and efficient, appropriate and sufficiently interference-free use of frequencies.

The Regulation is issued under section 96, subsection 1 and section 97, subsection 2 of the Act on Electronic Communications Services (917/2014).

The Radio Frequency Regulation concerns the radio frequency spectrum 100 Hz–400 GHz. The Frequency Allocation Table annexed to the Regulation contains provisions on the allocation of different radio frequencies, frequency bands and sub-bands for different purposes of use. The Table also contains the requirements for transmitting and receiving frequencies and the used channel spacing. The Table also contains provisions on radio transmitters' bandwidth of transmission, duplex separation, transmitted powers and other corresponding radio characteristics. The Frequency Allocation Table annexed to the Regulation also applies to electrical equipment that are used for scientific, industrial, medical or other similar purposes and designated to generate radio frequency energy (ISM equipment).

The Frequency Allocation Table also takes into consideration the Radio Regulations of the International Telecommunication Union (ITU), which have been implemented in Finland by Decree 12/2000.

The Regulation requires regular updates, which are based on international frequency rules and recommendations as well as currently planned changes to the utilisation of frequency bands.

Other related regulations and statutes

The use of radio transmitter frequencies is also subject to the provisions of the Finnish Transport and Communications Agency's Regulation 15 on collective frequencies for licence-exempt radio transmitters and their use. Regulations 4 and 15 are updated simultaneously.

Objectives of the Regulation

The objective of the Radio Frequency Regulation and the radio frequency utilisation plan is to safeguard the efficient use of the radio frequency spectrum. The radio frequency utilisation plan is published with the aim of supplying equipment manufacturers and users with information on the use of radio frequencies and on the protection against interference provided for radio networks by means of frequency planning. In addition to equipment design applications, manufacturers need this information in order to fulfil their obligations under Article 10 of Directive 2014/53/EU regarding the information to be included in user instruction manuals.

Drafting process

Stakeholder consultations will take place during May and June 2021 via [Lausuntopalvelu.fi](https://lausuntopalvelu.fi). Information on the request for comments will be provided on the Agency's website and via email to stakeholders. After the national consultation process, the Ministry of Economic Affairs and Employment will notify the European Commission of the Regulation in autumn 2021 (3 months) in accordance with Directive (EU) 2015/1535.

Comments received through consultation

The Finnish Transport and Communications Agency received one comment from the Finnish Amateur Radio League (SRAL). The comment is available on the website Lausuntopalvelu.fi (in Finnish).

In its comment, SRAL proposed changes to the frequency allocation table. In its response to SRAL, the Finnish Transport and Communications Agency noted that it will continue discussing the proposed changes in cooperation with SRAL and possible changes may be made in connection with future updates to the Radio Frequency Regulation.

Changes and impact assessment

The amendments being now made to the Regulation aim to promote the construction of local wireless broadband networks, enable the use of radio links with higher capacity, update conditions for the use of frequencies, exempt certain radio transmitters from licencing and implement European frequency decisions.

The new version of the Regulation, version 4 AC / 2021 M, includes, for example, the following amendments (all amendments will be listed in a separate annex to the Regulation):

Fixed service

Channels 1–4 on 28 MHz that may be used for radio links in the 13 GHz frequency band have been corrected (previously channels 1–3).

A completely new channel plan for channels with a width of 220 MHz has been added for radio links in the 18 GHz frequency band.

A completely new channel plan for channels with a width of 224 MHz has been added for radio links in the 23 GHz frequency band.

The following comment has been added for the sub-band 57.2 - 58.2 GHz: For equipment taken into use before 1.2.2009. No new licences.

The following sub-bands have been removed from the frequency band 17.300 - 19.300 GHz (5 MHz channels):

Sub-band 18.6575 - 18.6825 GHz
(0.025 GHz)
Radio links

Sub-band 19.6675 - 19.6925 GHz
(0.025 GHz)
Radio links

The following sub-bands have been removed from the frequency band 21.200 - 23.600 GHz (3.5 MHz channels):

Sub-band 22.5855 - 22.5890 GHz
(0.0035 GHz)
Radio links

Sub-band 23.5935 - 23.5970 GHz
(0.0035 GHz)

Radio links

The Radio Regulations footnotes "(RR 5.136, 5.143, 5.146 and 5.151)" previously referred to in the frequency bands listed below have been corrected to only refer to the sub-bands concerned:

5900-5950 kHz: 5.136

7300-7400 kHz: 5.143 and 5.143B

9400-9500 kHz: 5.146

11 600-11 650 kHz: 5.146

12 050-12 100 kHz: 5.146

13 570-13 600 kHz: 5.151

13 800-13 870 kHz: 5.151

15 600-15 800 kHz: 5.146

17 480-17 550 kHz: 5.146

18 900-19 020 kHz: 5.146

Mobile service

The Radio Regulations footnotes "(RR 5.136, 5.143, 5.146 and 5.151)" previously referred to in the frequency bands listed below have been corrected to only refer to the sub-bands concerned:

5900-5950 kHz: 5.136

7300-7400 kHz: 5.143 and 5.143B

13 570-13 600 kHz: 5.151

13 800-13 870 kHz: 5.151

The text "No new PMR use" has been added to the comments column for the sub-band 35.350 - 40.550 MHz.

The frequency band 174 - 230 MHz that has been secondarily allocated for radio microphones has been amended so that sub-bands 174 - 195 MHz and 216 - 225 MHz are for use by radio microphones.

The sub-band 195 - 216 MHz has been allocated for product development and testing of wireless communications applications for a fixed term until 31 December 2024.

The alternative channel width / bandwidth of emission 25 kHz / 16 kHz has been added to the sub-band 438 - 440 MHz.

The frequency 415.6125/425.6125 MHz has been added for sales demonstrations of TETRA equipment.

Sub-band 1427 - 1452 MHz:

- The purpose of use of the sub-band has been changed from mobile service to terrestrial systems capable of providing electronic communications services.
- Duplex base station (FB)TX has been added to the column including technical data.
- Reference to Government Decree 1246/2014 has been added to the comments column.

Sub-band 1452 - 1492 MHz:

- Reference to Government Decree 1246/2014 has been added to the comments column.

Sub-band 1492 - 1518 MHz:

- The purpose of use of the sub-band has been changed from mobile service to terrestrial systems capable of providing electronic communications services.
- Duplex base station (FB)TX has been added to the column including technical data.

- Reference to Government Decree 1246/2014 has been added to the comments column.

Sub-bands 703-733 MHz / 758-788 MHz, 1427-1452 MHz, 1452-1492 MHz, 1492-1518 MHz, 2300-2320 MHz, 24,250-25,100 GHz, 25,100-27,000 GHz and 27,000-27,500 GHz: Reference to Government Decree 1244/2014 has been added to the comments column.

Sub-band 5945 - 6425 MHz has been allocated for wide-band data transmission equipment (WAS/RLAN).

Military use

Military use has been extended to cover the whole sub-band 1427 - 1518 MHz, and a reference to Government Decree 1246/2014 has been added.

Sub-band 225 - 230 MHz has been allocated for military use.

Broadcasting

Broadcasting has been removed from the frequency band 174 - 230 MHz.

Aeronautical radionavigation

Reference to RR 5.197A has been added to the sub-band 111.975 - 117.975 MHz because it applies to the whole frequency band 108 - 117.975 MHz.

Fixed satellite service

A reference to ECC Decision ECC/DEC/(17)04 has been added for the sub-band 14.0 - 14.5 GHz. A comment has been added indicating that in the sub-band 14.25 - 14.5 GHz the maximum radiated power of fixed terminal equipment is 45 dBW EIRP.

Radiolocation

Use by public authorities has been added for the sub-band 10.5 - 10.6 GHz.

Radio astronomy

For the sub-band 13360 - 13410 kHz, a reference to a Radio Regulations footnote "(RR 5.149)" has been added to the comment "Protection for radio astronomy".

Short-range devices

The missing comment "13553 - 13567 kHz ISM (RR 5.150)." has been added to the sub-band 13553 - 13567 kHz.

The missing comment "26957 - 27283 kHz ISM (RR 5.150)." has been added to the sub-band 26957 - 27283 kHz.

In sub-bands 169.4000 - 169.4750 MHz and 169.4875 - 169.5875 MHz, the radiated power of hearing aids exempt from licensing has been changed to 500 mW ERP.

Entry into force

The amended Regulation enters into force in 17 December 2021.