

## **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 sections 96(1) and 97(2) of the Act on Electronic Communications Services (917/2014).

The Radio Frequency Regulation concerns the 100 Hz–400 GHz radio frequency spectrum. The Frequency Allocation Table appended 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 applies also 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.

The Regulation now includes references to Commission Implementing Decision (EU) 2020/590 amending Decision (EU) 2019/784 as regards an update of relevant technical conditions applicable to the 24,25-27,5 GHz frequency band.

### **Other relevant legal provisions**

The use of radio transmitter frequencies is also governed by Regulation 15 of the Finnish Transport and Communications Agency on the collective frequencies for licence-exempt radio transmitters and on their use. Regulations 4 and 15 are amended concurrently.

### **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 be carried out in September and October 2020 via the Lausuntopalvelu.fi service. Information on the request for opinions will be available on the agency's website and via an email sent to stakeholders.

Following a national consultation, the Ministry of Economic Affairs and Employment will notify the European Commission of the Regulation over the course of a three-month period between October and January in accordance with Directive (EU) 2015/1535.

### **Comments received through consultation**

The Finnish Amateur Radio League (SRAL) and Telia Finland Plc submitted comments on the Regulation. The comments are available in Finnish on the [Lausuntopalvelu.fi](https://lausuntopalvelu.fi) website.

SRAL's comments concerned the conditions on the use of the 2 MHz, 50–52 MHz and 1240–1300 MHz frequency bands for amateur radio communications and the synchronisation requirement regarding the 2300–2320 MHz band.

In its reply to SRAL, Traficom stated that it is not necessary to change the practices concerning 2 MHz at this stage, but suggested changes could be discussed with SRAL. Traficom has published a press release regarding the changes to the use of the 50 MHz frequency range on its website.

Traficom considers that it is not necessary, at least at this stage, to change the practice related to the use of the 1.3 GHz frequency range. Radio Frequency Regulation 4 makes it possible to grant licences to amateur radio operators on a case-by-case basis. Technical investigations conducted by Traficom regarding the 2300–2320 MHz frequency band show that it is, as a rule, necessary to impose a synchronisation requirement in radio licences for the networks in question in order to guarantee the efficient and interference-free use of the frequencies.

The comments made by Telia Finland Plc concerned the frequency ranges and channel plans of radio links and references to decisions of the European Commission.

In its reply to Telia Finland Plc, Traficom stated that wider channel plans for radio links are also being investigated in other frequency ranges, and they may be included in the Regulation after they have been specified in the ETSI standard. The missing references to the Commission decisions will be added.

### **Changes and impact assessment**

The changes being made to the Regulation now aim to promote the construction of wireless broadband networks, enable the utilisation of higher-capacity radio links, exempt radio transmitters from licence requirements, and implement decisions made by the World Radiocommunication Conference 2019, thus laying the foundations for future technologies.

The new version of the Regulation, 4 AA /2021 M, includes the following changes:

- The Frequency Allocation Table has been updated to begin at 100 Hz (previously 8.3 kHz), as a result of which the Regulation now applies to inductive equipment operating in the 100 Hz–8.3 kHz range.
- Updates and additions to the 13 GHz, 18 GHz and 23 GHz channel plans.
- Removal of the radio systems of the fixed wireless access network from the frequency bands 10.500–10.590 GHz and 10.150–10.240 GHz
- Specification related to the use of wireless camera frequencies within 2290–2400 MHz.
- Exemption from licence requirements of terminal devices of private local radio networks based on mobile technology for a limited user group in the 2300–2320 MHz sub-band.

- Inclusion in the comment fields for the 2500–2570 MHz, 2570–2620 MHz and 2620–2690 MHz sub-bands of a reference to Commission Implementing Decision (EU) 2020/636.
- Exemption from licence requirements of terminal devices of local radio networks based on mobile technology in the 24.250–25.100 GHz sub-band and inclusion in the comment field of a reference to Commission Implementing Decision (EU) 2020/590.
- Inclusion in the comment fields for the 25.100–27.000 GHz and 27.000–27.500 GHz sub-bands of a reference to Commission Implementing Decision (EU) 2020/590.
- Changes made on the basis of decisions taken by the World Radiocommunication Conference 2019:
  - Amateur radio use of the 50 MHz frequency range
  - Land mobile systems' allocation 40.5–42.5 GHz, utilisation plan being prepared
  - Addition of the Space Operation mode of traffic to the 137.025–138.000 MHz and 148.000–149.900 MHz frequency ranges.
  - Mobile service (except aeronautical mobile) allocation 42.5-43.5 GHz, utilisation plan being prepared
- Removal of fixed satellite allocations (earth-to-space) 5725-5925 MHz and 5850-5925 MHz.
- Assignment of additional frequency bands for short-range radio transmitters intended for use in data networks in the 870.0-874.4 MHz and 915.0-919.4 MHz frequency ranges in accordance with the ECC Recommendation ERC/REC 70-03 on the use of Short Range Devices.

All amendments made to this version are listed in an annex to the Regulation.

### **Entry into force**

The entry into force of the amended Regulation on 5 February 2021.