

This is an unofficial translation of the Regulation in Norwegian. In case of inconsistency between the Norwegian Regulation and this translation, the Norwegian Regulation shall prevail.

This Regulation gives access to frequencies based on principles of general authorisation. No further requirement of license / concessions exists regarding use of the frequencies set out below.

Regulations on Authorised Frequency Use

Section 1 *Scope*

These regulations authorise the use of radio frequencies.

Section 2 *Geographical extent*

These regulations do not apply to Jan Mayen, the dependencies and the Antarctic.

Section 3 *Disturbances*

Frequency use pursuant to these regulations is not protected against interference from other lawful frequency use.

Section 4 *Definition*

Transmission time: the time that a radio transmitter is active, expressed in per cent of one hour.

Channel separation: Distance between the centre frequencies in two channels. In cases where channel separation is defined for the frequency bands, the centre frequency in the first channel is located one half channel separation above the frequency limiting the frequency band downwards. The centre frequency for the last channel is located one half channel separation below the frequency limiting the frequency band upwards.

Section 5 *Frequencies freely available for use*

Use of frequencies below 9 kHz and above 400 GHz is authorised.

Section 6 *Telecommunication terminal equipment*

Telecommunications terminal equipment for satellite systems is authorised to use the frequencies stated below:

a) SITs - Satellite Interactive Terminals - are authorised to use the frequency bands 10.70 - 12.75 GHz (downlink) and 29.50 - 30.00 GHz (uplink) in accordance with the frequency use described in CEPT/ERC/DEC(00)03. Antenna diameter is up to 1.2 m. Maximum authorised equivalent isotropically radiated power (e.i.r.p.) is 50 dBW. This provision does not apply to Svalbard or inside the perimeter fence of an airfield and 500 meters beyond.

b) SUTs - Satellite User Terminals - are authorised to use the frequency bands 19.70 - 20.20 GHz (downlink) and 29.50 - 30.00 GHz (uplink) in accordance with the frequency use described in CEPT/ERC/DEC(00)04. Antenna diameter is up to 1.8 m. Maximum authorised transmitter power is 2 W and maximum authorised e.i.r.p. is 50 dBW. These provisions do not apply to Svalbard or within 500 m of airfields.

- c) Satellite terminals (VSAT – Very Small Aperture Terminals) are authorised to use the frequency bands 10.7 – 12.75 GHz (downlink) and 14.0 – 14.5 GHz (uplink) in accordance with the frequency use described in CEPT/ERC/DEC(00)05. Antenna diameter is up to 3.8 m. Maximum allowed transmitter power is 2 W and maximum allowed radiated power is 80 dBW eirp. These provisions do not apply to Svalbard or within 500 m of airfields.
- d) The Argos system is authorised to use the frequency 401.650 +/- 0.005 MHz.
- e) Landmobile Inmarsat terminals of the type B, C, D, M, M4 and Mini-M (Inmarsat phone) are authorised to use the frequency bands 1525 - 1559 MHz (downlink) except for 1544 - 1545 MHz, and 1626.5 and 1660.5 MHz (uplink) except for 1645.5 – 1646.5 MHz, in accordance with the frequency use described in CEPT/ERC/DEC(98)12 13, 14 and 29 and CEPT/ERC/DEC(99)18 and 20. This provision does not apply to maritime and aeromobile Inmarsat terminals.
- f) Omnitrac terminals for the Euteltrac system are authorised to use the frequency bands 10.70 - 11.7 and 12.5 - 12.75 GHz (downlink) and 14.00 - 14.25 GHz (uplink) as described in CEPT/ERC/DEC(98)15.
- g) Satellite telephones for Globalstar are authorised to use the frequency band 1610.0 - 1621.35 MHz and for Iridium 1621.35 - 1626.5 MHz.
- h) Mobile satellite terminals linked to Thuraya satellite networks are authorised to use the frequency bands 1525 – 1559 MHz (downlink) and 1626.5 – 1660.5 MHz (uplink) in accordance with the frequency use described in ERC/DEC(01)25.
- i) Mobile satellite terminals (Space Checker S-SMS) are authorised to use the frequency bands 1525 – 1559 MHz (downlink) and 1626.5 – 1660.5 MHz (uplink) in accordance with the frequency use described in ERC/DEC(01)22.
- j) Mobile satellite terminals (EMS-MSSAT) are authorised to use the frequency bands 1525 – 1559 MHz (downlink), with the exception of 1544 – 1545 MHz, and 1626.5 – 1660.5 MHz (uplink), with the exception of 1645.5 – 1646.5 MHz, in accordance with the frequency use described in ERC/DEC(98)19.
- k) Mobile satellite terminals (EMS-PRODAT) are authorised to use the frequency bands 1525 – 1559 MHz (downlink), with the exception of 1544 – 1545 MHz, and 1626.5 – 1660.5 MHz (uplink), with the exception of 1645.5 – 1646.5 MHz, in accordance with the frequency use described in ERC/DEC(98)18.
- l) ARCANET Suitcase terminals are authorised to use the frequency bands 11.45 – 11.70 GHz and 12.50 – 12.75 GHz (downlink) and 14.00 – 14.25 GHz (uplink) in accordance with the frequency use described in ERC/DEC(98)17.
- m) Mobile satellite terminals (SNG - Satellite News Gathering) are authorised to use the frequency bands 10.7 – 12.75 GHz (downlink) and 14.0 – 14.5 GHz (uplink) in accordance with the frequency use defined in the standard EN 301 430. Antenna diameter is up to 5 m. Maximum allowed radiated power is 80 dBW e.i.r.p. These provisions do not apply to Svalbard or within 500 m of airfields.

Section 7 *Cordless telephones and local area networks etc.*

Use of the frequency band 959 – 960 MHz is authorised for base stations and use of the frequency band 914 – 915 MHz is authorised for handsets in accordance with the frequency use defined in the standard EN 301 796. Channel separation is 25 kHz. Maximum allowed radiated power is 10 mW e.r.p.

Use of the frequency band 1880 – 1900 MHz is authorised in accordance with the frequency use defined in the standard EN 301 406. Maximum allowed radiated power is 250 mW e.i.r.p.

Use of the frequency band 2400 – 2483.5 MHz is authorised in accordance with the frequency use defined in the standard ETS 300 328. For direct sequence spread spectrum, the maximum allowed power density is -20 dBW e.i.r.p. per MHz. For frequency hopping, the maximum allowed power density is -10 dBW e.i.r.p. per 100 kHz. Maximum allowed radiated power is 100 mW e.i.r.p. This subsection does not apply for the geographical area with a radius of 20 km from the centre of Ny-Ålesund.

Indoor use of the frequency band 5150 – 5350 MHz (Frequency Band A) is authorised for local radio networks. Maximum allowed radiated power is 120 mW e.i.r.p. if the radio equipment used is equipped with transmitter power control (TPC) or 60 mW e.i.r.p. if the radio equipment used is not equipped with transmitter power control (TPC). Alternatively, the maximum allowed radiated power is 200 mW e.i.r.p. if the radio equipment used is equipped with transmitter power control (TPC) and dynamic frequency selection (DFS). Use of the frequency band 5470 – 5725 MHz (Frequency Band B) is authorised for local radio networks. Maximum allowed radiated power is 1 W e.i.r.p.

Dynamic frequency selection (DFS) must implement a random channel access mechanism which operates across a total of 330 MHz in both frequency bands A and B, and with a minimum of 3 dB attenuation of average output power. Frequency use pursuant to fourth subsection must be in accordance with Table 7.1. For a transmitter, the spectrum mask for frequency use pursuant to fourth subsection must be in accordance with Figure 7.1.

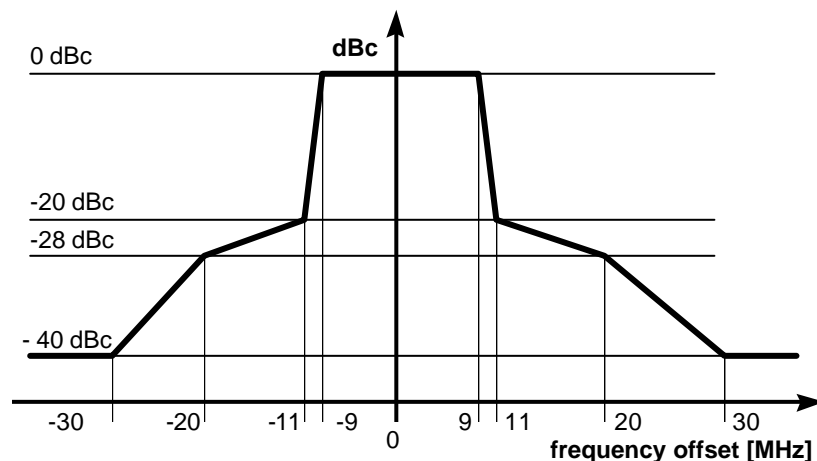


Figure 7.1

Frequency band	Centre frequency (MHz)
A	5180
A	5200
A	5220
A	5240
A	5260
A	5280
A	5300
A	5320
B	5500
B	5520
B	5540
B	5560
B	5580
B	5600
B	5620
B	5640
B	5660
B	5680
B	5700

Table 7.1

Section 8 *Alarms etc.*

Use of the frequency band 869.200 – 869.250 MHz is authorised for social alarms and safety alarms. Channel separation is 25 kHz. Maximum allowed radiated power is 10 mW e.r.p. Duty cycle is less than 0.1 percent.

Use of the frequency bands 868.6 – 868.7 MHz and 869.250 – 869.300 MHz is authorised. Channel separation is 25 kHz. Maximum allowed radiated power is 10 mW e.r.p. Duty cycle is less than 0.1 percent. Use of the frequency band 868.6 – 868.7 MHz is authorised as a channel for high-speed data transmission.

Use of the frequency band 869,650 – 869,700 MHz is authorised. Channel separation is 25 kHz. Maximum allowed radiated power is 25 mW e.r.p. Duty cycle is less than 10 percent.

Section 9 *Various short range devices*

Use of the frequencies 26.995 MHz, 27.045 MHz, 27.095 MHz, 27.145 MHz, 27.195 MHz, 27.255 MHz and 40.660 - 40.700 MHz is authorised. Maximum authorised e.r.p. is 10 mW.

Use of the frequencies 40.710 MHz, 40.720 MHz, 40.730 MHz and 40.740 MHz is authorised for baby alarms. Maximum authorised e.r.p. is 25 mW.

Use of the frequency band 433.050 – 434.790 MHz is authorised. Maximum allowed radiated power is 10 mW e.r.p. Duty cycle is less than 10 percent. As an alternative, use of the frequency band 434.040 – 434.790 MHz is authorised with a maximum radiated power of 10 mW e.r.p, a maximum allowed channel separation of 25 kHz and a duty cycle of 100 %, but in this event, transmission of voice and audio is not authorised.

Use of the frequency band 868.000 - 868.600 MHz is authorised. Maximum authorised e.r.p. is 25 mW. Transmission time is less than 1.0 per cent.

Use of the frequency band 869.400 - 869.650 MHz is authorised. Maximum authorised e.r.p. is 500 mW. Transmission time is less than 10 per cent. The frequency band may also be used as a channel for high-speed data communication.

Use of the frequency band 869.700 - 870.000 MHz is authorised. Maximum authorised e.r.p. is 5 mW.

Use of the frequency band 2400 - 2483.5 MHz is authorised. Maximum authorised e.i.r.p. is 10 mW. This subsection does not apply for the geographical area with a radius of 20 km from the centre of Ny-Ålesund.

Use of the frequency band 5725 - 5875 MHz is authorised. Maximum authorised e.i.r.p. is 25 mW.

Use of the frequency bands 24.00 - 24.25 GHz, 61.0 - 61.5 GHz, 122 - 123 GHz and 244 - 246 GHz is authorised. Maximum authorised e.i.r.p. is 100 mW.

Use of the frequency band 138.2 – 138.45 MHz is authorised. Maximum allowed radiated power is 10 mW e.r.p. Duty cycle is less than 0.1 percent.

Use of the frequency band 868.700 – 869.200 MHz is authorised. Maximum allowed radiated power is 25 mW e.r.p. Duty cycle is less than 1.0 percent.

Use of the frequency band 869.300 – 869.400 MHz is authorised. Maximum allowed radiated power is 10 mW e.r.p. Channel separation is 25 kHz.

Use of the frequencies 444.600 MHz, 444.650 MHz, 444.800 MHz, 444.825 MHz, 444.850 MHz and 444.975 MHz is authorised for hand-held mobile radios (KDR 444) in accordance with the frequency use defined in the standard EN 300 296. Maximum allowed transmitter power is 0.5 W.

Use of the frequency band 83.2125 – 83.3125 MHz is authorised for baby alarms. Maximum radiated power is 10 mW e.r.p. Maximum channel separation is 25 kHz.

Use of the frequency bands 6765 – 6795 kHz and 13553 – 13567 kHz is authorised. Maximum allowed field strength is 42 dBµA/m at a distance of 10 metres.

Use of the frequency band 445.2 – 445.3 MHz is authorised in accordance with the frequency use defined in ERC/DEC(01)21. Maximum allowed radiated power is 1 W e.r.p.

Use of the frequency band 446.000 – 446.100 MHz is authorised in accordance with the frequency use defined in ERC/DEC/(98)25. Maximum allowed radiated power is 500 mW e.r.p, and the radio equipment must have an integrated antenna. Channel separation is 12.5 kHz. The lowest channel is 446.00625 MHz.

Section 10 *Radio equipment for detecting movement*

Use of the frequency band 2.4 - 2.4835 GHz is authorised for radio equipment for detecting movement. Maximum authorised is 25 mW e.i.r.p.. For radio equipment with a channel bandwidth of a maximum of 10 MHz the maximum authorised e.i.r.p. is 500 mW. This subsection does not apply for the geographical area with a radius of 20 km from the centre of Ny-Ålesund.

Use of the frequency bands 10.5 - 10.6 GHz and 24.05 - 24.25 GHz is authorised for radio equipment for detecting movement. Maximum authorised e.i.r.p. is 500 mW.

Use of the frequency bands 9200 – 9500 MHz, 9500 – 9975 MHz and 13.4 – 14.0 GHz for motion-detecting radio equipment is authorised. Maximum allowed radiated power is 25 mW e.i.r.p.

Section 11 *Medical telemetry*

Use of the frequencies in table 11.1 is authorised for medical telemetry. Maximum authorised e.r.p. is 10 mW.

441,750 MHz	441,775 MHz	441,800 MHz	441,825 MHz	441,850 MHz
441,875 MHz	441,900 MHz	441,925 MHz	441,950 MHz	441,975 MHz

Table 11.1]

Section 12 *Medical implants*

Use of the frequency band 402 - 405 MHz is authorised. Channel bandwidth is up to 300 kHz. Maximum authorised e.r.p. is 25 µW.

The frequency band 9 – 315 kHz is authorised in accordance with the frequency use described in ERC/REC 70-03 annex 12.

Section 13 *Road transport and traffic telematics*

Use of the frequency band 76 - 77 GHz is authorised in accordance with the frequency use defined in the EN 301 091 standard. The maximum authorised peak value is 55 dBm e.i.r.p. The maximum authorised mean value is 50 dBm e.i.r.p. The maximum authorised mean value for pulsating radars is 23.5 dBm e.i.r.p..

Section 14 *Automatic vehicle identification for railways and train control systems*

Use of the frequencies 2447.0 MHz, 2448.5 MHz, 2450.0 MHz, 2451.5 MHz and 2453.0 MHz is authorised for automatic vehicle identification for railways in accordance with the frequency use defined in the EN 300 761 standard. Maximum authorised e.i.r.p. is 500 mW. The radio equipment shall only be activated when trains pass.

Use of the frequencies 27.095 MHz/27.115 MHz is authorised for Eurobalise. The maximum authorised field value is shown in figure 14.1 which illustrates magnetic field value limits measured at 10 meters' distance.

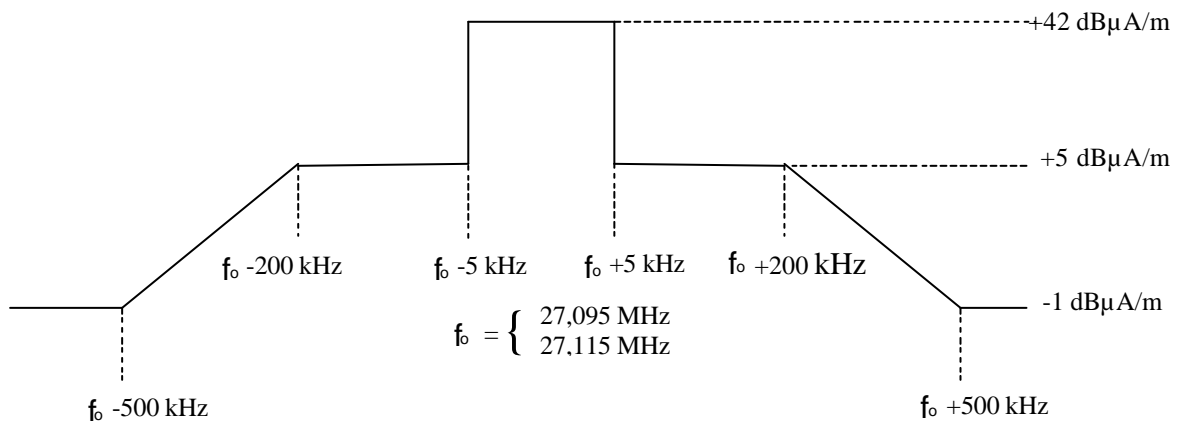


Figure 14.1

Use of the frequency 4515 kHz is authorised for Euroloop. The maximum authorised field value and bandwidth is shown in figure 14.2 which illustrates magnetic field value limits measured at 10 meters' distance.

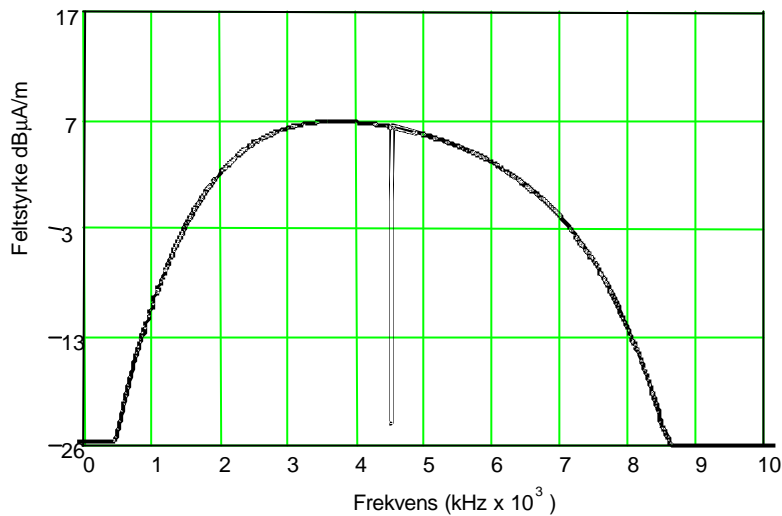


Figure 14.2

Section 15 *Homing equipment*

Use of the frequencies is authorised in accordance with the frequency use defined in the ETS 300 718 standard:

- a) 2275 Hz. The maximum authorised field value is 42 dBµA/m at 10 meters' distance or
- b) 457 kHz. The maximum authorised field value is 7 dBµA/m at 10 meters' distance.

Use of the frequencies 142,275 MHz and 142,325 MHz is authorised. Maximum authorised e.r.p. is 500 mW.

Section 16 *Remote control*

Use of the frequencies in table 16.1 is authorised for all types of remote control. Maximum authorised e.r.p. is 100 mW.

26,995 MHz	27,045 MHz	27,095 MHz	27,145 MHz	27,195 MHz
27,255 MHz	40,665 MHz	40,675 MHz	40,685 MHz	40,695 MHz

Table 16.1

Use of the frequencies in table 16.2 is authorised for remote control of model airplanes. Maximum authorised e.r.p. is 100 mW.

35,010 MHz	35,020 MHz	35,030 MHz	35,040 MHz	35,050 MHz	35,060 MHz
35,070 MHz	35,080 MHz	35,090 MHz	35,100 MHz	35,110 MHz	35,120 MHz
35,130 MHz	35,140 MHz	35,150 MHz	35,160 MHz	35,170 MHz	35,180 MHz
35,190 MHz	35,200 MHz	35,210 MHz	35,220 MHz	35,230 MHz	35,240 MHz
35,250 MHz	35,260 MHz	35,270 MHz	35,280 MHz	35,290 MHz	35,300 MHz

Table 16.2

Use of the frequencies in table 16.3 is authorised for remote control of model cars and model boats. Maximum authorised e.r.p. is 100 mW.

35,310 MHz	35,320 MHz	35,330 MHz	35,340 MHz	35,350 MHz	35,360 MHz
35,370 MHz	35,380 MHz	35,390 MHz	40,705 MHz	40,715 MHz	40,725 MHz
40,735 MHz	40,745 MHz	40,755 MHz	40,765 MHz	40,775 MHz	40,785 MHz
40,795 MHz					

Table 16.3

Use of the frequencies in table 16.4 is authorised for remote control of cranes. Maximum authorised emitted effect is 100 mW e.r.p.

441,550 MHz	441,575 MHz	441,625 MHz	441,725 MHz
440,725 MHz	440,750 MHz	441,325 MHz	441,600 MHz

Table 16.4

Section 17 *Cordless microphones*

Use of the following frequency bands is authorised:

- 41.000 – 43.600 MHz. Maximum allowed radiated power is 10 mW e.r.p.
- 800 – 820 MHz. Maximum allowed radiated power is 20 mW e.r.p.
- 863 – 865 MHz. Maximum allowed radiated power is 10 mW e.r.p. For analogue equipment, the maximum occupied bandwidth is 300 kHz.
- 1785 – 1800 MHz. Maximum allowed radiated power is 50 mW e.i.r.p.

Channel separation shall not exceed 200 kHz. Amplitude modulation is not permitted.

Use of the frequencies 173.8125 MHz, 173.8375 MHz, 173.8625 MHz, 173.8875 MHz, 173.9125 MHz, 173.9375 MHz, 173.9625 MHz and 173.9875 MHz is authorised for aids for the hearing impaired. Channel separation is 25 kHz. Maximum allowed radiated power is 10 mW e.r.p. for stationary equipment and 2 mW e.r.p. for portable equipment.

Section 18 *Cordless audio equipment*

Use of the frequency band 863 - 865 MHz in accordance with the frequency use defined in the EN 301 357 standard. Channel bandwidth shall not exceed 300 kHz. Maximum authorised is 10 mW e.r.p. For analogue equipment, the maximum occupied bandwidth is 300 kHz.

Use of the frequency band 864.8 – 865 MHz is authorised. Channel separation is 50 kHz.

Section 19 *Inductive systems*

Use of the frequency bands 9 - 59.750 kHz, 60.250 - 70 kHz and 119 - 135 kHz is authorised in accordance with the frequency use defined in the EN 300 330 standard. The maximum authorised field value is 72 dB μ A/m at a distance of 10 m, receding 3 dB per octave from 30 kHz.

Use of the frequency bands 59.750 - 60.250 kHz, 70 - 119 kHz, 6.765 - 6.795 MHz, 13.553 - 13.567 MHz and 26.957 - 27.283 MHz is authorised. The maximum authorised field value is 42 dB μ A/m at a distance of 10 metres.

Use of the frequency band 7.4 - 8.8 MHz is authorised. The maximum authorised field value is 9 dB μ A/m at a distance of 10 metres.

Section 20 *Private radio (PR 27)*

Use of the frequencies in table 20.1 is authorised. Maximum authorised is 4.0 W e.r.p. Frequency use shall be as defined in the ETS 300 135 standard.

Kanal	Frekvens (MHz)	Kanal	Frekvens (MHz)	Kanal	Frekvens (MHz)
1	26,965	14	27,125	27	27,275
2	26,975	15	27,135	28	27,285
3	26,985	16	27,155	29	27,295
4	27,005	17	27,165	30	27,305
5	27,015	18	27,175	31	27,315
6	27,025	19	27,185	32	27,325
7	27,035	20	27,205	33	27,335
8	27,055	21	27,215	34	27,345
9	27,065	22	27,225	35	27,355
10	27,075	23	27,255	36	27,365
11	27,085	24	27,235	37	27,375
12	27,105	25	27,245	38	27,385
13	27,115	26	27,265	39	27,395
				40	27,405

Table 20.1

Section 21 *Active radar reflectors*

Use of the frequency bands 2900 – 3100 MHz and 9300 – 9320 MHz is authorised in accordance with the frequency use and technical parameters defined in Rec. ITU-R M.1176. Channel separation is 50 kHz. Maximum allowed radiated power is 10 mW e.r.p.

Section 22 *Radio frequency identification equipment (RFID)*

Use of the frequency band 2446 – 2454 MHz is authorised in accordance with the frequency use defined in ERC/REC 70-03, Annex 5.

Section 23 *Mobile video links*

Use of the centre frequencies 2305 MHz, 2313 MHz, 2327 MHz and 2390 MHz with a maximum occupied bandwidth of 8 MHz is authorised for mobile video links. Maximum allowed radiated power is 2 W e.i.r.p.