

**Table 1** (related to Article 5)

Table of frequency tolerance

Frequency band	Radio station	Tolerance of frequency (other than those to which Hz or kHz is added are indicated in %)
1 9 kHz to 526.5 kHz	1 Fixed stations (1) 9 kHz to 50 kHz (2) 50 kHz to 526.5 kHz 2 Land stations 3 Mobile stations (1) Ship stations a Transmitting equipment of survival boats and life buoys b Other transmitting equipment (2) Aircraft stations 4 Radio determination stations 5 Standard frequency stations	100 50 100   500 200 100 100 0.005
2 526.5 kHz to 1,606.5 kHz	Broadcasting stations	10 Hz
3 1,606.5 kHz to 4,000 kHz	1 Fixed stations (Note 10, 11) (1) 200 W or lower (2) higher than 200 W 2 Land stations (1) Aeronautical stations (Note 12) (2) Other land stations (Note 10, 13) a 200 W or lower b higher than 200 W 3 Mobile stations (1) Transmitting equipment of survival boats and life buoys (2) Aircraft stations (Note 12) (3) Other mobile stations (Note 10, 13) 4 Radio determination stations	100 50  10 Hz  100 50  100 20 Hz 50

	<p>(1) Radio stations of radio buoys</p> <p>(2) Other radio determination stations (Note 14)</p> <p>    200 W or lower</p> <p>    higher than 200 W</p> <p>5 Broadcasting stations (Note 15)</p> <p>6 Standard frequency stations</p> <p>7 Amateur radio stations</p>	<p>100</p> <p>20</p> <p>10</p> <p>10 Hz</p> <p>0.005</p> <p>500</p>
4 4 MHz to 29.7 MHz	<p>1 Fixed stations (Note 11, 16)</p> <p>    (1) Those of 500 W or lower</p> <p>    (2) Those of higher than 500 W</p> <p>2 Land stations</p> <p>    (1) Coast stations (Note 13, 17)</p> <p>    (2) Aeronautical stations (Note 12)</p> <p>    (3) Other land stations</p> <p>3 Mobile stations</p> <p>    (1) Ship stations</p> <p>        a Transmitting equipment of survival boats and life buoys</p> <p>        b Other transmitting equipment (Note 13, 17)</p> <p>    (2) Aircraft stations (Note 12)</p> <p>    (3) Other mobile stations</p> <p>4 Radio stations of radio buoys</p> <p>5 Broadcasting stations (Note 15)</p> <p>6 Standard frequency stations</p> <p>7 Amateur radio stations</p> <p>8 Convenience radio stations and radio stations of citizens band</p> <p>9 Earth stations and space stations</p>	<p>20</p> <p>10</p> <p>20 kHz</p> <p>10 kHz</p> <p>20</p> <p>50</p> <p>50 kHz</p> <p>20 kHz</p> <p>40</p> <p>50</p> <p>10 Hz</p> <p>0.005</p> <p>500</p> <p>50</p> <p>20</p>
5 29.7 MHz to 100 MHz	<p>1 Fixed stations, land stations and mobile stations (Note 18, 19, 20)</p> <p>    (1) 54 MHz to 70 MHz</p> <p>        a 1 W or lower</p>	<p>20</p>

	<ul style="list-style-type: none"> <li>b higher than 1 W</li> <li>(2) Other frequencies</li> <li>2 Radio determination stations</li> <li>3 Broadcasting stations <ul style="list-style-type: none"> <li>(1) Broadcasting stations which perform television broadcasting or television multiplex broadcasting (Note 21)</li> <li>(2) Other broadcasting stations</li> </ul> </li> <li>4 Standard frequency stations</li> <li>5 Amateur radio stations</li> <li>6 Earth stations and space stations</li> <li>7 Specified low-power radio stations</li> </ul>	<ul style="list-style-type: none"> <li>10</li> <li>20</li> <li>50</li> <li></li> <li>500 Hz</li> <li>20</li> <li>0.005</li> <li>500</li> <li>20</li> <li>20</li> </ul>
6 100 MHz to 470 MHz	<ul style="list-style-type: none"> <li>1 Fixed stations (Note 18, 20, 22, 44) <ul style="list-style-type: none"> <li>(1) 335.4 MHz to 470 MHz (Note 23) <ul style="list-style-type: none"> <li>a 1 W or lower</li> <li>b higher than 1 W</li> </ul> </li> <li>(2) Other frequencies <ul style="list-style-type: none"> <li>a 1 W or lower</li> <li>b higher than 1 W</li> </ul> </li> </ul> </li> <li>2 Land stations (Note 18, 20, 22, 24) <ul style="list-style-type: none"> <li>(1) Coast stations <ul style="list-style-type: none"> <li>a Higher than 335.4 MHz to 470 MHz <ul style="list-style-type: none"> <li>(a) 1 W or lower</li> <li>(b) higher than 1 W</li> </ul> </li> <li>b Other frequencies</li> </ul> </li> <li>(2) Aeronautical stations (Note 45)</li> <li>(3) Radio calling stations (limited to those which are established with the aim of performing telecommunication service) <ul style="list-style-type: none"> <li>a Higher than 273 MHz to 328.6 MHz <ul style="list-style-type: none"> <li>(a) The transmission rate of modulation signal exceeds 500 bit/s</li> <li>(b) Other transmission rates</li> </ul> </li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>4</li> <li>3</li> <li></li> <li>15</li> <li>10</li> <li></li> <li>4</li> <li>3</li> <li>10</li> <li>20</li> <li></li> <li></li> <li>7</li> <li>3</li> </ul>

	b Those of other frequencies	3
	(4) Other land stations (Note 44)	
	a 100 MHz to 142 MHz, 162.0375 MHz to 235 MHz (Note 28)	15
	b 142 MHz to 162.0375 MHz	
	(a) 1 W or lower	15
	(b) Higher than 1 W	10
	c 235 MHz to 335.4 MHz	7
	d 335.4 MHz to 470 MHz (Note 23)	
	(a) 1 W or lower	4
	(b) higher than 1 W	3
	3 Mobile stations (Note 18, 20, 22, 24)	
	(1) Ship stations	
	a 156 MHz to 174 MHz (Note 46)	10
	b 335.4 MHz to 470 MHz (Note 25)	
	(a) 1 W or lower	4
	(b) higher than 1 W	3
	c Other frequencies	
	(a) Transmitting equipment of survival boats and life buoys	50
	(b) Other transmitting equipment	
	A 1 W or lower	50
	B higher than 1 W	20
	(2) Aircraft stations (Note 27, 45)	30
	(3) Other mobile stations (Note 44)	
	a 100 MHz to 142 MHz, 162.0375 MHz to 235 MHz (Note 28)	15
	b 142 MHz to 162.0375 MHz	
	(a) 1 W or lower	15
	(b) higher than 1 W	10
	c 235 MHz to 335.4 MHz	7
	d 335.4 MHz to 470 MHz (Note 23, 25, 28, 31)	
	(a) 1 W or lower	4

	(b) higher than 1 W	3
	4 Radio determination stations (Note 29)	
	(1) Transmitting equipment of VOR	20
	(2) Other radio determination stations (Note 30)	50
	5 Broadcasting stations (Note 21)	
	(1) Broadcasting stations which perform digital broadcasting (excluding satellite supplementary broadcasting) out of VHF broadcasting	1 Hz
	(2) Other broadcasting stations	500 Hz
	6 Standard frequency stations	0.005
	7 Amateur radio stations	500
	8 Convenience radio stations (Note 44)	
	(1) 335.4 MHz to 470 MHz	
	a 1 W or lower	4
	b higher than 1 W	3
	(2) Other frequencies	20
	9 Radio stations of cordless telephones, specified low-power radio stations and radio stations of low-power security systems (Note 34, 36, 41)	4
	10 Earth stations and space stations	20
7	470 MHz to 2,450 MHz	
	1 Fixed stations (Note 20, 31, 35)	
	(1) 810 MHz to 960 MHz	1.5
	(2) Other frequencies	
	a 100 W or lower	100
	b Higher than 100 W	50
	2 Land stations and mobile stations (Note 20, 31, 34, 35, 37, 38)	
	(1) 810 MHz to 960 MHz	1.5
	(2) Other frequencies (Note 39)	20
	3 Radio determination stations (Note 29)	
	(1) Transmitting equipment of land DME	

	and land TACAN	20
	(2) Transmitting equipment of airborne DME and airborne TACAN	100 kHz
	(3) Transmitting equipment of SSR	
	a With Mode S	10 kHz
	b Others	200 kHz
	(4) Transmitting equipment of ATC transponder	
	a With Mode S	
	(a) The altitude of 4,500 m or lower	3,000 kHz
	(b) Other than (a)	1,000 kHz
	b Others	3,000 kHz
	(5) Other radio determination stations	500
	4 Broadcasting stations (Note 21, 49)	
	(1) Broadcasting stations which perform digital broadcasting out of television broadcasting	1 Hz
	(2) Other broadcasting stations	500 Hz
	5 Amateur radio stations	500
	6 Convenience radio stations	3
	7 Earth stations and space stations (Note 32, 33, 40)	20
	8 Specified low-power radio stations (Note 36)	4
	9 Radio stations of digital cordless telephones	3
	10 Radio stations of low-power data-based communication systems	50
8	2,450 MHz to 10,500 MHz	
	1 Fixed stations (Note 31)	
	(1) 100 W or lower	200
	(2) higher than 100 W	50
	2 Land stations and mobile stations (Note 20, 31, 34, 36 and 47)	100
	3 Radio determination stations	
	(1) MLS angle system	10 kHz

	<p>(2) Other radio determination stations (Note 19)</p> <p>4 Amateur radio stations</p> <p>5 Earth stations and space stations</p> <p>6 Radio stations of low-power data-based communication systems</p> <p>(1) Those which use emissions of a frequency of 5,180 MHz, 5,190 MHz, 5,200 MHz, 5,220 MHz, 5,230 MHz, 5,240 MHz, 5,260 MHz, 5,270 MHz, 5,280 MHz, 5,300 MHz, 5,310 MHz, 5,320 MHz, 5,500 MHz, 5,510 MHz, 5,520 MHz, 5,540 MHz, 5,550 MHz, 5,560 MHz, 5,580 MHz, 5,590 MHz, 5,600 MHz, 5,620 MHz, 5,630 MHz, 5,640 MHz, 5,660 MHz, 5,670 MHz, 5,680 MHz, or 5,700 MHz</p> <p>(2) Other frequencies</p> <p>7 Radio stations which perform road traffic information communication</p> <p>8 Radio stations which perform satellite supplementary broadcasting</p>	<p>1,250</p> <p>500</p> <p>50</p> <p>20</p> <p>50</p> <p>1.5</p> <p>50</p>
9 10.5 GHz to 81 GHz	<p>1 Radio determination stations</p> <p>(1) Vehicle sensing radio beacon land stations</p> <p>(2) Other radio determination stations (Note 29)</p> <p>2 Amateur radio stations</p> <p>3 Convenience radio stations</p> <p>4 Earth stations and space stations (Note 40)</p> <p>5 Specified low-power radio stations (Note 34)</p> <p>6 Radio stations of a low-power data communication system</p>	<p>800</p> <p>5,000</p> <p>500</p> <p>200</p> <p>100</p> <p>500</p> <p>20</p>

	7 Other radio stations (Note 21, 31, 34, 42, 48)	300
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- Notes:
- 1 “Hz” in the table represents Hertz, and the units of radio-wave frequency, “W” and “kW” represent Watt or kilo Watt, which are units of antenna-power intensity.
  - 2 “Antenna power” in the table shall be mean power (pY).
  - 3 When the same frequency is used for two or more services by the same transmitting equipment, the transmitting equipment having a severer tolerance shall be used.
  - 4 The tolerance for the emission frequency used for the transmitting equipment of emergency stations, experiment stations, meteorological aid stations (excluding those prescribed in Note 9), and stations for special service shall be the value of the fixed station having a corresponding frequency band (the mobile station if it is a moving radio station (excluding that which performs radio locating), and the radio determination station if it is a radio station which performs radio locating). However, the tolerance for a frequency emission used for the transmitting equipment of experiment stations having special transmitting equipment shall be specified.
  - 5 In the case of the transmitting equipment used at a radio station which performs two or more services according to the proviso of Article 2 paragraph 3 of the License Regulations, the tolerance for the emission used by the radio station performing said services shall apply to the said transmitting equipment.
  - 6 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of radio navigation land stations which use emissions of a frequency in a range of 285 kHz to 325 kHz and which provide satellite location error correction information shall be 2 Hz.
  - 7 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment (excluding that of broadcasting stations, aeronautical stations and aircraft stations) of radio telephones of single side-band which use emissions of a frequency in a range of higher than 9 kHz to 29,700 kHz shall be as defined in the table below.

Frequency band	Radio station	Tolerance (Hz)
1 9 kHz to 526.5 kHz, 4 kHz to 29.7 kHz	1 Fixed station and land station	20
	2 Mobile station	50
2 1,606.5 kHz to 4,000 kHz	1 Fixed station and land station	20
	2 Mobile station	40

- 8 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of coast stations or ship stations which use class F1B or F1D emissions of a frequency of 29.7 MHz or lower shall be 10 Hz.
- 9 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment listed in the following items shall be as follows.

(1) Radiosondes which use emissions of a frequency of 404.5 MHz	2,500 (10 <sup>-6</sup> )
(2) Radiosondes which use emissions of a frequency of 1,673 MHz, 1,680 MHz or 1,687 MHz	4,000 (10 <sup>-6</sup> )
(3) Equivalents to (1) and (2) which are specially acknowledged by the Minister of Internal Affairs and Communications	4,000 (10 <sup>-6</sup> )

- 10 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of frequency shift telegraphs (excluding the transmitting equipment of coast stations and ship stations) shall be as follows.

- |                                       |       |
|---------------------------------------|-------|
| (1) Fixed stations                    | 10 Hz |
| (2) Land stations and mobile stations | 40 Hz |

- 11 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of independent side-band shall be as follows.

- |                     |       |
|---------------------|-------|
| (1) 500 W or lower  | 50 Hz |
| (2) 500 W or higher | 20 Hz |

- 12 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of aeronautical stations or aircraft stations which use emissions of a frequency in a range of higher than 1,606.5 kHz to 29,700 kHz (excluding the transmitting equipment of radio telephones and radio data transmissions of single side-band) shall be as shown in the table below.

Frequency band	Radio station	Tolerance (%)
1 1,606.5 kHz to 4,000 kHz	1 Aeronautical stations	
	(1) 200 W or lower	100
	(2) 200 W or higher	50
	2 Aircraft stations	100
2 4 MHz to 29.7 MHz	1 Aeronautical stations	

	(1) 500 W or lower	100
	(2) 500 W or higher	50
	2 Aircraft stations	100

- 13 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of the digital selective calling devices based on radio telephones which use class J3E emissions or radio stations of maritime mobile service which perform communication based on narrowband direct printing telegraphs which use emissions of a frequency of 1,606.5 kHz to 26,175 kHz shall be 10 Hz.
- 14 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of radio beacon stations which use emissions of a frequency in a range of higher than 1,606.5 kHz to 1,800 kHz shall be 50 (10<sup>-6</sup>).
- 15 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment which uses class A3E emissions and whose carrier power is 10 kW or lower shall be as shown in the following items.
- (1) That which uses emissions of a frequency in a range of higher than 1,606.5 kHz to 4,000 kHz 20 (10<sup>-6</sup>)
- (2) That which uses emissions of a frequency in a range of higher than 4 MHz to 29.7 MHz 15 (10<sup>-6</sup>)
- 16 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment which uses class F1B emissions shall be 10 Hz.
- 17 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment which uses class A1A emissions shall be 10 (10<sup>-6</sup>).
- 18 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of multiple channels which use emissions of a frequency in a range of higher than 54 MHz to 470 MHz shall be as shown in the following items.
- (1) Transmitting equipment of single side-band based on a compressed carrier 1 (10<sup>-6</sup>)
- (2) Transmitting equipment of land mobile stations which use emissions of a

frequency in a range of higher than 100 MHz to 470 MHz (excluding transmitting equipment mentioned in (1)) 15 (10-6)

(3) Transmitting equipment of fixed stations which perform radio telecommunications for city, town, or village disaster prevention 3 (10-6)

(4) Transmitting equipment other than that mentioned in (1), (2) and (3) 20 (10-6)

19 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the radio operating oscillators of model aircraft, model boats and the like or radio microphones whose mean power is 1 W or lower, which use emissions of a frequency of 40.68 MHz, 42.89 MHz, 44.87 MHz or 47.27 shall be 300 (10-6).

20 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment (in the case of transmitting equipment of radio stations based on the proviso of Article 57.3, limited to that of the radio stations notified separately by the Minister of Internal Affairs and Communications) of fixed stations, radio stations for land mobile service, and radio stations for portable mobile service which use class F1B, F1C, F1D, F1E, F1F, F1N, F1X, G1B, G1C, G1D, G1E, G1F, G1N, or G1X emissions shall be as shown in the following items. However, the tolerance for the emission frequency used for the transmitting equipment of the radio stations notified separately by the Minister of Internal Affairs and Communications according to the proviso of Article 57.3 shall be separately notified by the Minister of Internal Affairs and Communications.

(1) Those which use emissions of a frequency in a range of higher than 54 MHz to 76 MHz

a Those which use a modulation signal whose transmission rate is 4 kilobit/s or less

(a) 1 W or lower 8 (10-6)

(b) higher than 1 W 5 (10-6)

b Those which use a modulation signal whose transmission rate is higher than 4 kilobit/s to 8 kilobit/s

(a) 1 W or lower 15 (10-6)

(b) higher than 1 W 10 (10-6)

(2) Those which use emissions of a frequency in a range of higher than 142 MHz to 170 MHz

- a Those which use a modulation signal whose transmission rate is 4 kilobit/s or less
  - (a) 1 W or lower 3 (10<sup>-6</sup>)
  - (b) higher than 1 W 2 (10<sup>-6</sup>)
- b Those which use a modulation signal whose transmission rate is higher than 4 kilobit/s to 8 kilobit/s
  - (a) 1 W or lower 6 (10<sup>-6</sup>)
  - (b) higher than 1 W 4 (10<sup>-6</sup>)
- c Those which use a modulation signal whose transmission rate is higher than 8 kilobit/s to 16 kilobit/s
  - (a) 1 W or lower 12 (10<sup>-6</sup>)
  - (b) higher than 1 W 8 (10<sup>-6</sup>)
- (3) Those which use emissions of a frequency in a range of higher than 335.4 MHz to 470 MHz or higher than 770 MHz to 960 MHz and which use a modulation signal whose transmission rate is 8 kilobit/s or less
  - a 1 W or lower 2 (10<sup>-6</sup>)
  - b higher than 1 W 1.5 (10<sup>-6</sup>)
- (4) Those which use emissions of a frequency in a range of higher than 1,215 MHz to 2,690 MHz and which use a modulation signal whose transmission rate is 16 kilobit/s or less 2 (10<sup>-6</sup>)

21 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of the broadcasting stations shown in the following items shall be as follows. However, the transmitting equipment of broadcasting station mentioned in (3) and notified separately by the Minister of Internal Affairs and Communications shall be comply with the technical conditions notified separately by the Minister of Internal Affairs and Communications, the transmitting equipment mentioned in (4) which uses emissions of a frequency of 470 MHz to 770 MHz and whose peak envelope power is 0.1 W or lower shall be separately specified.

- (1) Broadcasting stations which perform digital broadcasting (excluding satellite supplementary broadcasting) out of VHF broadcasting and which the Minister of Internal Affairs and Communications specifically acknowledges do not extremely interfere with the efficient use of radio waves 500 Hz
- (2) Broadcasting stations which perform digital broadcasting out of television broadcasting (excluding prescribed in (3)) and which the Minister of Internal

Affairs and Communications specifically acknowledges do not extremely interfere with the efficient use of radio waves 500 Hz

(3) Broadcasting stations which perform digital broadcasting out of television broadcasting, and which perform broadcasting by limited to that relay method of broadcast program of other broadcast station.

a The antenna power shall be exceeding 0.5 Watts; 3 kHz

b The antenna power shall be 0.5 Watts or less; 10 kHz

(4) Broadcasting stations performing television broadcasting or television multiplex broadcasting which converts the frequency emission of the broadcasting stations performing television broadcasting (excluding digital broadcasting; the same applies hereafter in this Note) or television multiplex broadcasting (in the case of television data-based multiplex broadcasting, limited to that which uses class C9W emissions and class F9W emissions; the same applies hereafter in this Note) and re-emits the converted frequency

a Those which use emissions of a frequency in a range of 90 MHz to 108 MHz and 170 MHz to 222 MHz 2 kHz

b Those which use emissions of a frequency in a range of 470 MHz to 770 MHz 3 kHz

c Those which use emissions of a frequency in a range of 12.092 GHz to 12.2 GHz 10 kHz

22 N.A.

23 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of radio stations which relays broadcasting shall be as follows.

(1) 1 W or lower 20 (10<sup>-6</sup>)

(2) Higher than 1 W 10 (10<sup>-6</sup>)

24 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency mentioned in the table of Supplementary Provisions 18 of the Radio Communication Regulations shall be 10 (10<sup>-6</sup>).

25 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of on-board communication equipment which uses emissions of a frequency in a range of higher than 450 MHz to 467.58 MHz shall be 5 (10<sup>-6</sup>).

26 Notwithstanding the values prescribed in this table, the tolerance for the emission

frequency used for the transmitting equipment of two-way radio telephones between ships and aircraft shall be 5 (10-6).

27 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of survival radio equipment for aircraft and portable radio equipment for aircraft shall be as follows.

(1) Those which use class A3X or class A3E emissions of a frequency of 121.5 MHz and 243 MHz 50 (10-6)

(2) Those which use class G1B emissions of a frequency of 406 MHz to 406.1 MHz 5 kHz

28 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of position-indicating radio beacons for satellite emergency, and the transmitting equipment of the radio equipment prescribed in Article 45-3-5 shall be as follows.

(1) Those which use class G1B emissions of a frequency of 406 MHz to 406.1 MHz; 5 kHz

(2) Those which use class A3X emissions of a frequency of 121.5 MHz; 50 (10-6)

29 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment can be based on a specified frequency band. In this case, the specified frequency and the specified frequency band of the transmitting equipment shall be notified separately by the Minister of Internal Affairs and Communications.

(1) The radar for radio navigation installed on ships or aircraft

(2) The radar transponders for search and rescue

(3) The transmitting equipment of radio station for radiolocation service using emissions of a frequency in a range of 10.5 GHz to 10.55 GHz or 24.15 GHz to 24.25 GHz

30 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of ILS localizers which use two emission frequencies simultaneously shall be 20 (10-6).

31 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of fixed stations, land stations, and mobile stations mentioned in the following items shall be as follows.

(1) That which is used for transmitting equipment of radio stations which perform portable radio communication

- a Radio stations which perform TDMA portable radio communication equipment
  - (a) Base stations 0.5 (10<sup>-6</sup>)
  - (b) Land mobile stations 3 (10<sup>-6</sup>)  
 (When emissions of a frequency in a range of higher than 1,429 MHz to 1,501 MHz are used, the tolerance shall be 2 (10<sup>-6</sup>).
- b Radio stations which perform communication, etc. for testing TDMA portable radio communication equipment
  - (a) 1 W or lower 3 (10<sup>-6</sup>)  
 (When emissions of a frequency in a range of higher than 1,429 MHz to 1,501 MHz are used, the tolerance shall be 2 (10<sup>-6</sup>).
  - (b) higher than 1 W 0.5 (10<sup>-6</sup>)
- c Radio stations performing CDMA portable radio communication which use emissions at frequencies greater than 815 MHz but no more than 850 MHz, greater than 860 MHz but no more than 901 MHz, or greater than 915 MHz but no more than 940 MHz, and radio stations performing communication, etc. for testing CDMA portable radio communication equipment, radio stations performing time division multiplexing/code division multiplexing portable radio communication, and radio stations performing communication, etc. for testing time division multiplexing/code division multiplexing portable radio communication equipment
  - (a) The permissible tolerance for transmitting equipment at radio stations with a spread code speed of 3.84 Mchips per second shall be the value found with the following formulas:
    - A Base stations: (0.05 × f × 10<sup>-6</sup> + 12) Hz  
 (however, (0.1 × f × 10<sup>-6</sup> + 12) Hz for the antenna power of 8 dB (1 W regarded as 0 dB) or lower)
    - B Land mobile stations (except performing a relay of portable radio communication): (0.1 × f × 10<sup>-6</sup> + 10) Hz
    - C Land mobile stations (limited performing a relay of portable radio communication):
      - (a) The land mobile relay station which is facing up to the base station; (0.1 × f × 10<sup>-6</sup> + 10) Hz

- (b) The land mobile relay station which is facing up to the land mobile station;  $(0.1 \times f \times 10^{-6} + 12)$  Hz

Where f is the frequency in Hz of the radio signal used by the transmitting equipment

- (b) The permissible tolerance for transmitting equipment at radio stations with a spread code speed of 1.2288 Mchips per second shall be the following values:

- A Base stations: 0.05 (10<sup>-6</sup>)
- B Land mobile stations (except performing a rely of portable radio communication): 300 Hz
- C Land mobile stations (limited performing a rely of portable radio communication):
  - (a) The land mobile relay station which is facing up to the base station; 300 Hz
  - (b) The land mobile relay station which is facing up to the land mobile station; 0.05 (10<sup>-6</sup>)

- d Radio stations performing CDMA portable radio communication which use emissions of a frequency in a range of higher than 1,427.9 MHz to 1,452.9 MHz, higher than 1,475.9 MHz to 1,500.9 MHz, higher than 1,749.9 MHz to 1,784.9 MHz, higher than 1,844.9 MHz to 1, 879.9 MHz, higher than 1,920 MHz to 1,980 MHz or higher than 2,110 MHz to 2,170 MHz and radio stations performing communication, etc. for testing CDMA portable radio communication equipment, radio stations performing time division multiplexing/code division multiplexing portable radio communication, and radio stations performing communication, etc. for testing time division multiplexing/code division multiplexing portable radio communication equipment

- (a) Radio stations whose spread code speed is 3.84 M chips/s  
The permissible tolerance shall be obtained from the following formulas.

- (i) Base stations:  $(0.05 \times f \times 10^{-6} + 12)$  Hz

(however,  $(0.1 \times f \times 10^{-6} + 12)$  Hz for the antenna power of 8 dB (1 W regarded as 0 dB) or lower)

(ii) Land mobile stations (except performing a rely of portable radio communication):  $(0.1 \times f \times 10^{-6} + 10)$  Hz

(iii) Land mobile stations (limited performing a rely of portable radio communication):

(a) The land mobile relay station which is facing up to the base station;  $(0.1 \times f \times 10^{-6} + 10)$  Hz

(b) The land mobile relay station which is facing up to the land mobile station;  $(0.1 \times f \times 10^{-6} + 12)$  Hz

Where  $f$  is the frequency in Hz of the radio signal used by the transmitting equipment

(b) Radio stations with a spread code speed of 1.2288 Mchips/s or 3.6864 Mchips/s

(i) Base stations: 0.05 ( $10^{-6}$ )

(ii) Land mobile stations (except performing a rely of portable radio communication): 150 Hz

(iii) Land mobile stations (limited performing a rely of portable radio communication):

(a) The land mobile relay station which is facing up to the base station; 150 Hz

(b) The land mobile relay station which is facing up to the land mobile station; 0.05 ( $10^{-6}$ )

e Radio stations that perform TDMA/CDMA portable radio communication and radio stations that perform communication, etc. for testing TDMA/CDMA portable radio communication equipment.

The permissible tolerance shall be obtained from the following formulas.

(a) Base stations:  $(0.05 \times f \times 10^{-6} + 12)$  Hz

(b) Land mobile stations (except performing a rely of portable radio

communication):  $(0.1 \times f \times 10^{-6} + 10)$  Hz

(c) Land mobile stations (limited performing a rely of portable radio communication):

(i) The land mobile relay station which is facing up to the base station;

$(0.1 \times f \times 10^{-6} + 10)$  Hz

(ii) The land mobile relay station which is facing up to the land mobile station;

$(0.1 \times f \times 10^{-6} + 12)$  Hz

Where  $f$  is the frequency in Hz of the radio signal used by the transmitting equipment

(2) Those which use emissions of a frequency in a range of higher than 830 MHz to 887 MHz and which are listed in the following items

a Those which perform airport radio telephone communication

(a) Base stations: 0.5 (10<sup>-6</sup>)

(b) Land mobile stations: 2 (10<sup>-6</sup>)

b Radio stations which perform communication for testing airport radio telephone communication equipment 2 (10<sup>-6</sup>)

(3) Those which use emissions of a frequency in a range of higher than 836 MHz to 915 MHz and which are listed in the following items

a Those which perform MCA land mobile communication

(a) MCA control stations:

A MCA control stations whose frequency shift or frequency deviation is higher than  $(\pm) 2.5$  kHz to  $(\pm) 5$  kHz 1 (10<sup>-6</sup>)

B MCA control stations whose frequency shift or frequency deviation is within  $(\pm) 2.5$  kHz 0.5 (10<sup>-6</sup>)

(b) Directive stations and land mobile stations

A Directive stations and land mobile stations whose frequency shift or frequency deviation is higher than  $(\pm) 2.5$  kHz to  $(\pm) 5$  kHz 3 (10<sup>-6</sup>)

B Directive stations and land mobile stations whose frequency shift or frequency deviation is within  $(\pm) 2.5$  kHz 2 (10<sup>-6</sup>)

- b Radio stations which perform communication for testing MCA land mobile communication equipment (excluding those whose transmitting equipment is shared with MCA control stations)
  - (a) Radio stations whose frequency shift or frequency deviation is higher than  $(\pm) 2.5 \text{ kHz}$  to  $(\pm) 5 \text{ kHz}$  3 (10-6)
  - (b) Radio stations whose frequency shift or frequency deviation is within  $(\pm) 2.5 \text{ kHz}$  2 (10-6)
- c Those which perform digital MCA land mobile communication
  - (a) Digital MCA control stations 0.1 (10-6)
  - (b) Digital directive stations and land mobile stations 3 (10-6)
- d Radio stations which perform communication for testing MCA land mobile communication equipment
  - (a) Radio stations whose transmitting equipment is shared with digital MCA control stations 0.1 (10-6)
  - (b) Others 3 (10-6)
- (4) Fixed stations which use emissions of a frequency in a range of higher than 940 MHz to 960 MHz (limited to those for broadcasting service)
  - a 100 W or lower 100 (10-6)
  - b higher than 100 W 50 (10-6)
- (5) Those which use emissions of a frequency in a range of higher than 1,453 MHz to 1,525 MHz and which are listed in the following items.
  - a Those which perform digital MCA land mobile communication
    - (a) Digital MCA control stations 0.1 (10-6)
    - (b) Digital directive stations and land mobile stations 2 (10-6)
  - b Radio stations which perform communication, etc. for testing digital MCA land mobile communication equipment
    - (a) Radio stations whose transmitting equipment is shared with digital MCA control stations 0.1 (10-6)
    - (b) Others 2 (10-6)
- (6) Transmitting equipment of radio stations which use class F2A, F2B, F2D, F2N, F2X or F3E emissions of a frequency in a range of higher than 1,215 MHz to 2,690 MHz 2 (10-6)
- (7) Those of time division multiplexing whose transmission capacity is 3.088 Mbit/s or less which use emissions of a frequency in a range of higher than 1,850 MHz to

- 2,110 MHz or those of time division multiplexing whose transmission capacity is 18,528 megabit/s or less which use emissions of a frequency in a range of higher than 7.425 GHz to 7.75 GHz 20 (10-6)
- (8) Transmitting equipment of land mobile stations of PHS which use emissions of a frequency in a range from 1,884.65 MHz to 1,919.45 MHz, base stations of PHS, radio stations which relay between base stations of PHS, and land mobile stations, and radio stations which perform communication, etc. for testing communication equipment of PHS 3 (10-6)
- (9) Transmitting equipment of fixed stations which perform 1,900 MHz band subscriber radio access communication or radio stations which perform communication, etc. for testing 1,900 MHz band subscriber radio access communication equipment 3 (10-6)
- (10) Transmitting equipment of radio stations relaying broadcasting
- a Transmitting equipment of radio stations relaying raw materials of broadcasting programs
- (a) Transmitting equipment which uses class D7W or G7W emissions of a frequency in a range of higher than 3.456 GHz to 13.25 GHz 20 (10-6)
- (b) Transmitting equipment which uses class X7W emissions of a frequency in a range of higher than 5.85 GHz to 13.25 GHz 7 (10-6)
- b Transmitting equipment of fixed stations that relay broadcasting programs and use a digital system among the transmitting equipment that uses emissions of a frequency in a range of higher than 3.456 GHz to 13.25 GHz 20 (10-6)
- (11) Radio stations as listed below which use emissions of a frequency in a range of higher than 5.770 GHz to 5.850 GHz
- a Base stations of narrow-band communication systems
- (a) ASK modulation method 20 (10-6)
- (b) other than (a) 5 (10-6)
- b Land mobile stations of narrow-band communication systems
- (a) ASK modulation method 50 (10-6)
- (b) other than (a) 20 (10-6)
- c Radio stations which perform communications for testing radio equipment of land mobile stations of narrow-band communication systems

- 5 (10<sup>-6</sup>)
- (12) Fixed stations forming a communication system which uses emissions of frequencies of 6.5 GHz, 7.5 GHz, and 12 GHz (excluding fixed stations specified in (7) and (10) a) 20 (10<sup>-6</sup>)
- (13) Radio equipment of radio stations in the land mobile service using emissions of frequencies of 22 GHz, 26 GHz, or 38 GHz band 50 (10<sup>-6</sup>)
- (14) Fixed stations for telecommunication service which use emissions of a frequency of 22 GHz
- a 4 level FSK or QPSK 50 (10<sup>-6</sup>)
- b 64QAM 50 (10<sup>-6</sup>)
- (15) Fixed stations for telecommunication service which use emissions of a frequency of 38 GHz 50 (10<sup>-6</sup>)
- (16) Those which use emissions of a frequency in a range of higher than 38 GHz to 39.5 GHz (excluding those listed in (13) and (15)) 100 (10<sup>-6</sup>)
- (17) Those which use emissions of a frequency in a range of higher than 54.25 GHz to 59 GHz 200 (10<sup>-6</sup>)
- (18) Fixed stations for telecommunication service which use emissions of a frequency in 1,500 MHz band (0.1 x f x 10<sup>-6+10</sup>) Hz  
Where f is the frequency in Hz of the radio signal used by the transmitting equipment
- (19) Radio stations performing OFDMA Broad band mobile wireless access system and radio stations performing communication, etc. for testing OFDMA Broad band mobile wireless access system radio equipment
- (a) The equipment which has a transmission burst length is 5 msec;
- (i) Base station; 2 (10<sup>-6</sup>)
- (ii) Land mobile station; 2 (10<sup>-6</sup>)
- (b) The equipment which has a transmission burst length is a natural number multiple of 911.46 micro seconds or a frequency that added 1,070 micro seconds to natural number multiple of 911.46 micro seconds;
- (i) Base stations: 0.05 (10<sup>-6</sup>)
- (ii) Land mobile stations: 2.5 (10<sup>-6</sup>)
- (20) Radio stations performing TDMA/OFDMA Broad band mobile wireless access system and radio stations performing communication, etc. for testing TDMA/OFDMA Broad band mobile wireless access system radio equipment

(a) Base station; 3 (10<sup>-6</sup>)

(b) Land mobile station; 3 (10<sup>-6</sup>)

(21) Radio stations performing TDMA/FDMA Broad band mobile wireless access system and radio stations performing communication, etc. for testing TDMA/FDMA Broad band mobile wireless access system radio equipment

(a) Base station; 0.05 (10<sup>-6</sup>)

(b) Land mobile station; 100 Hz

32 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of INMARSAT ship earth stations and INMARSAT portable mobile earth stations shall be as follows.

(1) INMARSAT C radio equipment and INMARSAT D radio equipment

150 Hz

(2) INMARSAT B radio equipment 200 Hz

(3) INMARSAT M radio equipment 1,090 Hz

(4) INMARSAT mini-M and INMARSAT F radio equipment 1,250 Hz

(5) INMARSAT BGAN radio equipment 1,660 Hz

33 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of radio stations which is established on a structure operated in a sea area and which performs radio communication by means of a relay through an INMARSAT artificial satellite shall be notified separately by the Minister of Internal Affairs and Communications.

34 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment can be based on a specified frequency band. In this case, the specified frequency and the specified frequency band of the transmitting equipment shall be notified separately by the Minister of Internal Affairs and Communications.

(1) The radio equipment of premises radio stations which use emissions of a frequency in a range of higher than 952 MHz to 954 MHz, higher than 2,400 MHz to 2,483.5 MHz.

(2) The radio equipment of specified low-power radio stations which use emissions of a frequency in a range of higher than 312 MHz to 315.25 MHz, higher than 402 MHz to 405 MHz, higher than 433.67 MHz to 434.17 MHz, higher than 952 MHz to 955 MHz, 2,400 MHz to 2,483.5 MHz, higher than 10.5 GHz to 10.55 GHz, higher than 24.05 GHz to 24.25 GHz, higher than 59 GHz to 66 GHz, or higher

than 76 GHz to 77 GHz

(3) The radio equipment of radio station of Ultra Wide-band wireless system

35 Deleted

36 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the radio equipment of specified low-power radio stations notified separately by the Minister of Internal Affairs and Communications shall be notified separately by the Minister of Internal Affairs and Communications.

37 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the radio equipment of premises radio stations which use emissions of a frequency in a range of higher than 1,215 MHz to 1,260 MHz shall be as follows.

(1) The channel interval is 25 kHz 3 (10<sup>-6</sup>)

(2) The channel interval is 50 kHz 4 (10<sup>-6</sup>)

38 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the ACAS transmitting equipment shall be as follows.

(1) ACAS-I 200 kHz

(2) ACAS-II 10 kHz

39 Deleted

40 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of aircraft earth stations shall be as follows (excluding the fluctuations by the automatic frequency correction function).

(1) Transmitting equipment (excluding transmitting equipment capable of high-speed radio data communications) using radio signals at frequencies greater than 1,626.5 MHz but no more than 1,660.5 MHz: 350 Hz

(2) Transmitting equipment (limited to transmitting equipment capable of high-speed radio data communications) using radio signals at frequencies greater than 1,626.5 MHz but no more than 1,660.5 MHz: 1,250 Hz

(3) Transmitting equipment using radio signals at frequencies greater than 14 GHz but no more than 14.5 GHz: 72.5 kHz

41 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of radio stations of low-power security systems whose occupied frequency bandwidth of a radio wave emitted are whether 4kHz or less, or higher than 8.5 kHz to 12 kHz shall be 10 (10<sup>-6</sup>).

42 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the radio equipment of premises radio stations which use emissions

of a frequency in a range of 19,485 MHz to 19,565 MHz shall be 10 (10-6).

43 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the radio equipment of portable mobile earth stations which use emissions of a frequency in a range of 1,621.35 MHz to 1,626.5 MHz or of 2,660 MHz to 2,690 MHz shall be as follows.

(1) Radio equipment which uses emissions of a frequency in a range of 1,621.35 MHz to 1,626.5 MHz 30 (10-6)

(2) Radio equipment which uses emissions of a frequency in a range of 2,660 MHz to 2,690 MHz 1 (10-6)

44 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of radio stations of the real-number zero-point single side-band modulation method (limited to the radio equipment which uses emissions of a frequency in a range of higher than 142 MHz to 170 MHz and higher than 335.4 MHz to 470 MHz) or narrowband digital communication method (excluding coast stations and aeronautical stations) shall be as shown in the table below, except for that of the radio equipment of radio stations which are separately notified by the Minister of Internal Affairs and Communications according to the proviso of Article 57.3.2.

Frequency Band	Type of Radio Station	Frequency Tolerance (%)		
		Channel Interval: 6.25 kHz	Channel Interval: 12.5 kHz	Channel Interval: 25 kHz
1 142 MHz to 170 MHz	Fixed Station, Land Station	+/- 2.5 (*1) +/- 0.5	+/- 3	+/- 3
	Land Mobile Station, Portable Station, Convenience Radio Station	+/- 2.5 (*2) +/- 2 + A	+/- 3	+/- 3
2 255 MHz to 275 MHz	Fixed station, Land stations	+/- 1.5 +/- 0.2 (*1)	+/- 2.9 +/- 0.5 (*1)	+/- 2.0 +/- 0.5 (*1)
	Land Mobile Station, Portable Station, 1 W or lower (average power)	+/- 2.5 +/- 2.3 + A (*2)	+/- 3	+/- 3
	Land Mobile Station,	+/- 1.5	+/- 2.9	+/- 2.0

	Portable Station higher than 1 W (average power)	$\pm 1.3 + A$ (*2)	$\pm 2.4 + A$ (*2)	$\pm 1.5 + A$ (*1)
3 335.4 MHz to 470 MHz	Fixed station, Land stations	$\pm 0.9$ $\pm 0.2$ (*2)	$\pm 1.7$ $\pm 0.5$ (*1)	$\pm 1.2$ $\pm 0.5$ (*1)
	Land Mobile Station, Portable Station, 1 W or lower (average power), Convenience Radio Station	$\pm 1.5$ $\pm 0.7 + A$ (*2)	$\pm 3$	$\pm 3$
	Land Mobile Station, Portable Station higher than 1 W (average power)	$\pm 0.9$ $\pm 0.7 + A$ (*2)	$\pm 1.7$ $\pm 1.2 + A$ (*2)	$\pm 1.2$ $\pm 0.7 + A$ (*2)

\*1 This value shall be limited to reference stations.

\*2 This value shall be limited to the case in which a frequency tracking function is used. In this case,  
A shall be the frequency departure of reference stations.

45 Notwithstanding the values in this table, the tolerance of the emission frequency used for the transmitting equipment using class G1D emissions shall be as follows.

(1) Aeronautical stations  $2(10^{-6})$

(2) Aircraft stations  $5(10^{-6})$

46 Notwithstanding the values in this table, the tolerance of the emission frequency used for the transmitting equipment of a ship automatic identification device that transmits emissions by means of TDMA shall be as follows.

(1) When the channel interval is 25 kHz  $5(10^{-6})$

(2) When the channel interval is 12.5 kHz  $3(10^{-6})$

47 Notwithstanding the values in this table, the tolerance of the emission frequency used for the transmitting equipment at a radio station of an access system in the 5 GHz band shall be  $2(10^{-6})$ .

48 Notwithstanding the values prescribed in this table, the tolerance for the emission frequency used for the transmitting equipment of radio stations for land mobile service using emissions of a frequency in the 18 GHz band, fixed stations for

telecommunications service using emissions of a frequency in the 18GHz band, and of fixed stations for public service using emissions of a frequency in the 18 GHz shall be 50(10-6).

- 49 More than one broadcasting stations which is constructed Single frequency network (Which is defined an aggregate of broadcasting stations that a broadcasting station (limited a performing digital broadcast of television broadcasting) near another broadcasting station (limited a performing digital broadcast of television broadcasting) transmits same broadcast program as the aforementioned another broadcasting station at an emission of same frequency in the same broadcast coverage area (which is defined broadcast coverage area prescribed in Article 2-2, Paragraph 2, Item 2 of Broadcast Law (Law No. 132 of 1950))), a value of relative frequency tolerance between the aforementioned more than one broadcasting stations shall be within 10 Hz in addition to a condition of prescribed in 4(1) of Item 7 of this table, a provision of Note 21, and (3) of Note 21.

**Table 2** (related to Article 6)

I. Table of permissible values of occupied bandwidth

Type of radio wave	Permissible value of occupied bandwidth	Remarks
A1A A1B A1D	0.25 kHz  6 MHz	Radio equipment of radio stations which use emissions of a frequency of 100 kHz or lower  Radio equipment of meteorological aid stations which use emissions of a frequency of 1,673 MHz, 1,680 MHz, or 1,687 MHz
	0.5 kHz	Radio equipment (excluding transmitting equipment of lifeboats and survival craft) of radio stations which do not apply to any of the two items above
A2A A2B A2D A2N A2X	5 kHz    6 kHz	Radio equipment (excluding transmitting equipment of lifeboats and survival craft) of radio stations for maritime mobile service which use a modulation frequency in a range of higher than 1,000 Hz to 2,200 Hz  Radio equipment (excluding transmitting equipment of aircraft

		ELT) of aeronautical stations and aircraft stations which use emissions of a frequency in a range of higher than 118 MHz to 142 MHz
	6.5 kHz	Radio equipment of radio beacon stations which emit a frequency of 75 MHz
	6 MHz	Radio equipment of meteorological aid stations which use emissions of a frequency of 1,673 MHz, 1,680 MHz, or 1,687 MHz
	2.5 kHz	Radio equipment (excluding transmitting equipment of lifeboats, survival craft, and aircraft ELT) of radio stations which do not apply to any of the four items above
A3E	8 kHz	Radio equipment of radio stations which perform international telecommunication service for transmitting broadcasting programs
	15 kHz	Radio equipment of broadcasting stations and radio stations which relay broadcasts
	6 kHz	Radio equipment (excluding aircraft ELT) of radio stations which do not apply to any of the two items above
C3F, F3E	6 MHz	Radio equipment of broadcasting stations which perform standard television broadcasting
D8E	15 MHz	Radio equipment of broadcasting stations and radio stations which relay broadcasts
C9W	6 MHz	Radio equipment of broadcasting stations
F1B, F1D	0.5 kHz	1 Radio equipment of ship stations and coast stations which is used for digital selective calling, narrowband direct printing telegraphs, printing telegraphs, or data transmission 2 Radio equipment of radio buoys
	11 kHz	Ship automatic identification system (limited to those in which the channel interval is 12.5 kHz)
	16 kHz	Ship automatic identification system (limited to those in which the channel interval is 25 kHz)
	6 MHz	Radio equipment of meteorological aid stations which use emissions of a frequency of 1,673 MHz, 1,680 MHz, or 1,687

		MHz
	2 kHz	Radio equipment of radio stations which do not apply to any of the items above (excluding those which perform communication by means of scattered waves)
F2A, F2B, F2D, F2N, F2X	8.5 kHz	1 Radio equipment of radio stations (excluding amateur radio stations) which use emissions of a frequency in a range of higher than 335.4 MHz to 470 MHz 2 Radio equipment of radio stations which use emissions of a frequency in a range of higher than 810 MHz to 960 MHz
	16 kHz	1 Radio equipment of radio stations (excluding amateur radio stations) which use emissions of a frequency in a range of higher than 54 MHz to 70 MHz or higher than 142 MHz to 162.0375 MHz 2 Radio equipment of convenience radio stations which use emissions of a frequency in a range of higher than 903 MHz to 905 MHz 3 Radio equipment of radio stations (excluding amateur radio stations) which use emissions of a frequency in a range of higher than 1,215 MHz to 2,690 MHz
	200 kHz	Radio equipment of broadcasting stations
	400 kHz	Radio equipment of fixed stations which use emissions of a frequency in a range of higher than 940 MHz to 960 MHz and relay broadcasting
	6 MHz	Radio equipment of meteorological aid stations which use emissions of a frequency of 1,673 MHz, 1,680 MHz, or 1,687 MHz
	3 kHz	Radio equipment of radio stations which do not apply to any of the five items above
	F2C, F3C	8.5 kHz

	16 kHz	<p>1 Radio equipment of radio stations (excluding radio stations which relay broadcasts) which use emissions of a frequency in a range of higher than 54 MHz to 70 MHz</p> <p>2 Radio equipment of radio stations (excluding amateur radio stations) which use emissions of a frequency in a range of higher than 142 MHz to 162.0375 MHz</p> <p>3 Radio equipment of radio stations (excluding amateur radio stations) which use emissions of a frequency in a range of higher than 1,215 MHz to 2,690 MHz</p>
F2E	200 kHz	Radio equipment of broadcasting stations
F3E	8.5 kHz	<p>1 Radio equipment (excluding on-board communication equipment which uses emissions of a frequency in a range of higher than 450 MHz to 467.58 MHz) of radio stations (excluding those which relay broadcasts and amateur radio stations) which use emissions of a frequency in a range of higher than 335.4 MHz to 470 MHz</p> <p>2 Radio equipment of radio stations which use emissions of a frequency in a range of higher than 810 MHz to 960 MHz</p>
	16 kHz	<p>1 Radio equipment of radio stations (excluding those which relay broadcasts) which use emissions of a frequency in a range of higher than 54 MHz to 70 MHz</p> <p>2 Radio equipment of radio stations (excluding amateur radio stations) which use emissions of a frequency in a range of higher than 142 MHz to 162.0375 MHz</p> <p>3 On-board radio equipment which uses emissions of a frequency in a range of higher than 450 MHz to 467.58 MHz</p> <p>4 Radio equipment of convenience radio stations which use emissions of a frequency in a range of higher than 903 MHz to 905 MHz</p> <p>5 Radio equipment of radio stations (excluding amateur radio stations) which use emissions of a frequency in a range of higher than 1,215 MHz to 2,690 MHz</p>
	26 kHz	Radio equipment of radio stations which use emissions of a frequency in a range of higher than 25.21 MHz to 27.5 MHz

	30 kHz	Radio equipment of amateur radio stations which use emissions of a frequency of 435 MHz
	100 kHz	Radio equipment of radio stations for mobile service which use emissions of a frequency in a range of higher than 162.0375 MHz to 585 MHz for relay broadcasting
	200 MHz	Radio equipment of broadcasting stations and fixed stations which use emissions of a frequency in a range of higher than 54 MHz to 585 MHz for relay broadcasting
	400 kHz	Radio equipment of fixed stations which use emissions of a frequency in a range of higher than 940 MHz to 960 MHz for relay broadcasting
	40 kHz	Radio equipment of radio stations using emissions of a frequency of 200 MHz which do not apply to any of the seven items above
F7D, F8D	6 MHz	Radio equipment of meteorological aid stations which use emissions of a frequency of 1,673 MHz, 1,680 MHz, or 1,687 MHz
F7W	27 MHz	Radio equipment of broadcasting satellite stations
F8E	200 kHz	Radio equipment of broadcasting stations and fixed stations which use emissions of a frequency in a range of higher than 54 MHz to 585 MHz for relay broadcasting
	400 kHz	Radio equipment of radio stations which use emissions of a frequency in a range of higher than 940 MHz to 960 MHz
F9D	6 MHz	Radio equipment of meteorological aid stations which use emissions of a frequency of 1,673 MHz, 1,680 MHz, or 1,687 MHz
F9W	200 kHz	Radio equipment of broadcasting stations
	27 kHz	Radio equipment of broadcasting satellite stations which use emissions of a frequency in a range of higher than 11.7 GHz to 12.2 GHz
G1B	20 kHz	Satellite emergency position-indicating radio beacons and aircraft emergency locator transmitters which use emissions of a frequency in a range of higher than 406 MHz to 406.1 MHz, the radio equipment prescribed in Article 45-3-5, and transmitting

		equipment of aircraft ELT
G7W	25 MHz	Broadcasting satellite stations that use emissions of frequencies in a range of higher than 2,630 MHz to 2,655 MHz or radio stations that perform satellite supplementary broadcasting
	27 MHz	Radio equipment of narrowband broadcasting satellite stations, and high-altitude narrowband broadcasting satellite stations
	34.5 MHz	Radio equipment of broadcasting satellite stations or broadband broadcasting satellite stations which use emissions of a frequency in a range of higher than 11.7 GHz to 12.2 GHz
H2A H2B H2D H2X	3 kHz	Radio equipment of radio stations for maritime mobile service which use a modulation frequency of higher than 1,000 Hz to 2,200 Hz (excluding transmitting equipment of survival boats and survival craft)
	1.5 kHz	Radio equipment of radio stations which do not apply to the preceding item (excluding transmitting equipment of survival boats and survival craft)
H3E	4.5 kHz	Radio equipment of broadcasting stations
	3 kHz	Radio equipment of radio stations which do not apply to the preceding item
J2C, J3C	3 kHz	Radio equipment of radio stations for maritime mobile service which use emissions of a frequency of 28 MHz or lower
J2D	2.8 kHz	Radio equipment of aircraft stations using emissions of a frequency of 22MHz or lower (limited only to the frequency of the aeronautical mobile (R) service)
J3E	7.5 kHz	Radio equipment of fixed stations which relay broadcasts
	3 kHz	Radio equipment of radio stations which do not apply to the preceding item
K2D, P0N	6 MHz	Radio equipment of meteorological aid stations which use emissions of a frequency of 1,673 MHz, 1,680 MHz, or 1,687 MHz
R3E	3 kHz	
V1D	6 MHz	1. Radio equipment of meteorological aid stations which use emissions of a frequency of 1,673 MHz, 1,680 MHz, or 1,687 MHz

		2. ACAS (excluding that which uses interrogation signals in the S mode)
	14.5 MHz	ATC transponder
	40 MHz	ACAS (limited to that which uses interrogation signals in the S mode)
V1X	1.5 MHz	Airborne DME
V3D	6 MHz	Radio equipment of meteorological aid stations which use emissions of a frequency of 1,673 MHz, 1,680 MHz, or 1,687 MHz
VXX	1.5 MHz	Airborne DME
WXX	700 kHz	MLS angle system
X7W	5.7 MHz	Radio equipment of broadcasting stations

II The occupied bandwidth permissible for the transmitted emissions of the following types shall be calculated by the following calculation formula and indicated. To specify this, a mark shall be added to the type of radio wave.

Type of radio wave	Calculation formula	Type of radio wave	Calculation formula
A1C A2C A3C	$1.5N + 2N$	F7B F7D (limited to four-frequency duplex)	$2.6 + 2.75B$
F1C F2C F3C	$1.5N + 2N + 2D$	The type of radio wave which uses pulse modulation (excluding that which is prescribed in Table 1)	$2k/t$

Notes: The marks in the calculation formula columns represent the following meanings.

- 1 N is the maximum possible number of the sum of black and white elements which are transmitted per second by facsimile.
- 2 M is the maximum modulation frequency shown in Hz.
- 3 D is 1/2 of the difference between the maximum and minimum values of an instantaneous frequency. The instantaneous frequency means the ratio of the change of phase.
- 4 B means the speed of telegraph shown in Baud. In the case of F7B and F7D, a faster

speed of telegraph channels shall be used.

- 5 k is a comprehensive numerical coefficient, and shall be usually 2 in the case of pulse modulation.
- 6 t is pulse width shown in seconds.

III. The occupied bandwidth permissible for the transmitted emissions of the types of radio waves (excluding A3X used for satellite emergency position-indicating radio beacons and aircraft emergency locator transmitters) other than the types of radio waves defined in I and II above shall be separately specified. To specify this, a mark shall be added to the type of radio wave.

IV. Notwithstanding the values prescribed in I above, the radio equipment notified separately by the Minister of Internal Affairs and Communications which uses the type of radio wave defined in I above shall be separately specified. To specify this, a mark shall be added to the type of radio wave. However, that which can be based on the calculation formula listed below shall be calculated thereby and specified.

Formula for calculating occupied bandwidth

Type of radio wave	Calculation formula	Type of radio wave	Calculation formula
A1A A1B A1D	5B	A3E	2M
A2A A2B A2D	5B + 2M	F2B F2D F3E	2M + 2Dk

Note: The note for this formula is the same as Note 2. However, “k” shall usually be 1 in the case of F2B, F2D, or F3E.

V. Notwithstanding the values prescribed in I to IV, the permissible values for the occupied bandwidth of the radio equipment of INMARSAT ship earth stations and INMARSAT portable mobile earth stations shall be specified as follows. To specify the value, the code representing the value shall be added to the code representing the type of radio wave.

- 1 INMARSAT C radio equipment
  - (1) Transmission speed of the modulation signal is 600 bits/second: 24 kHz
  - (2) Transmission speed of the modulation signal is 1,200 kbits/second: 48 kHz
- 2 INMARSAT B radio equipment
  - (1) Transmission speed of the modulation signal is 132 kbits/second: 136 kHz

	(2) Transmission speeds other than (1) above:	24 kHz
3	INMARSAT M radio equipment	
	(1) Transmission speed of the modulation signal is 3,000 bits/second:	60 kHz
	(2) Transmission speeds other than (1) above:	8 kHz
4	INMARSAT mini-M radio equipment and INMARSAT F radio equipment	
	(1) Transmission speed of the modulation signal is 3,000 bits/second:	60 kHz
	(2) Transmission speed of the modulation signal is either 67,200 bits/second or 134,400 bits/second:	40 kHz
	(3) Transmission speeds other than (1) and (2) above:	5.6 kHz
5	INMARSAT F radio equipment	
	(1) Transmission speed of the modulation signal is 3,000 bits/second:	60 kHz
	(2) Transmission speed of the modulation signal is 24,000 bits/second:	24 kHz
	(3) Transmission speed of the modulation signal is either 67,200 bits/second or 134,400 bits/second:	40 kHz
	(4) Transmission speed of the modulation signal is 268,800 bits/second:	84 kHz
	(5) Transmission speed other than (1) to (4) above:	5.6 kHz
6	INMARSAT D radio equipment:	512 Hz
7	INMARSAT BGAN radio equipment	
	(1) Transmission speed of the modulation signal is 33,600 bits/second:	21 kHz
	(2) Transmission speed of the modulation signal is 67,200 bits/second:	42 kHz
	(3) Transmission speed of the modulation signal is 134,400 bits/second	
	a 16 QAM:	42 kHz
	b Phase modulation:	84 kHz
	(4) Transmission speed of the modulation signal is 187,200 bits/second:	125 kHz
	(5) Transmission speed of the modulation signal is 234,000 bits/second:	157 kHz
	(6) Transmission speed of the modulation signal is 268,800 bits/second:	84 kHz
	(7) Transmission speed of the modulation signal is 302,400 bits/second or 604,800 bits/second:	189 kHz

VI. Notwithstanding the values prescribed in I to IV, the permissible value for the occupied bandwidth of the radio equipment of radio stations established on a structure operated on a sea area which perform communication by means of the relay of INMARSAT artificial satellite stations shall be separately specified by the Minister of Internal Affairs and Communications. To specify the value, the code representing the value shall be added to the code representing the type of radio wave.

VII. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of convenience radio stations which use emissions of a frequency in a range of higher than 50.4 GHz to 51.4 GHz shall be specified as follows. To specify this, a mark shall be added to the type of radio wave.

- 1 Radio equipment used to transmit a digital signal whose transmission rate of a television signal or a signal is 6.3 megabit/s or higher (excluding that mentioned in 3 below) 40 MHz
- 2 Radio equipment other than that mentioned in 1 and 3 10 MHz
- 3 Radio equipment to which the Minister of Internal Affairs and Communications acknowledges it difficult or unreasonable to apply the provisions of 1 and 2 above and notifies separately Value determined by a separate notification of the Minister of Internal Affairs and Communications

VIII Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of premises radio stations which use emissions of a frequency in a range of 952 MHz to 954 MHz, higher than 1,215 MHz to 1,260 MHz, higher than 2,425 MHz to 2,475 MHz, or higher than 19,485 MHz to 19,565 MHz shall be as follows.

- 1 Radio equipment which uses emissions of a frequency in a range of 952 MHz to 954 MHz  
200n kHz

Note: n represents the number of unit radio channels that are used simultaneously as one radio channel.

- 2 Radio equipment which uses emissions of a frequency in a range of higher than 1,215 MHz to 1,260 MHz
  - (1) Radio equipment whose channel interval is 25 kHz 16 kHz
  - (2) Radio equipment whose channel interval is 50 kHz 32 kHz
- 3 Radio equipment which uses emissions of a frequency in a range higher than 2,425 MHz to 2,475 MHz
  - (1) Radio equipment which uses a frequency hopping system 43.75MHz
  - (2) Other than (1) 5.5MHz
- 4 Radio equipment which uses emissions of a frequency in a range of higher than 19,485 MHz to 19,565 MHz 17 MHz

IX. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio calling stations (that which is established with the aim of conducting telecommunication service) shall be as follows. To specify this, a mark shall be added to the type of radio wave.

- 1 Radio equipment whose transmission rate of a modulation signal is 500 bit/s or lower

- 8.5 kHz
- 2 Radio equipment whose transmission rate of a modulation signal is 500 bit/s or higher
- 16 kHz
- X. N.A.
- XI. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment at radio stations which perform TDMA portable radio communication and at radio stations which perform communication, etc. for testing TDMA radio communication equipment shall be 32 kHz.
- XII . Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio stations which perform CDMA portable radio communication and radio stations which perform communication, etc. for testing CDMA portable radio communication equipment, at radio stations which perform time division multiplexing/code division multiplexing portable radio communication, and at radio stations which perform communication, etc. for testing time division multiplexing/code division multiplexing portable radio communication equipment, at radio stations which perform TDMA/CDMA portable radio communication, and at radio stations which perform communication, etc. for testing TDMA/CDMA portable radio communication equipment shall be as follows.
- 1 Radio equipment using radio signals at frequencies greater than 815 MHz but no more than 850 MHz, greater than 860 MHz but no more than 901 MHz, or greater than 915 MHz but no more than 940 MHz:
- (1) Radio equipment with a spread code speed of 3.84 Mbits/second
- 5.0 MHz
- (2) Radio equipment with a spread code speed of 1.2288 Mbits/second
- 1.48 MHz
- 2 Radio equipment which uses emissions of a frequency in a range higher than 1,749.9 MHz to 1,784.9 MHz, higher than 1,844.9 MHz to 1,879.9 MHz, higher than 1,920 MHz to 1,980 MHz, or higher than 2,110 MHz to 2,170 MHz
- (1) Radio equipment whose spread code speed is 3.84 Mbit/s
- 5.0 MHz
- (2) Radio equipment whose spread code speed is 1.2288 Mbit/s
- 1.48 MHz
- (3) Radio equipment whose spread code speed is 1.2288 Mbit/s per carrier, and whose number of carriers is 3 or whose spread code speed is 3.6864 Mchips/s
- 4.6 MHz
- 3 Radio equipment using emissions of a frequency higher than 2,010 MHz to 2,025 MHz
- (1) Those with a spread code speed of 3.84 Mchips/s
- 5.0 MHz

- |   |         |
|---|---------|
| (2) Those with a spread code speed of 7.68 Mchips/s | 10 MHz  |
| (3) Those with a spread code speed of 1.28 Mchips/s | 1.6 MHz |

XIII. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of fixed stations which use class F1B, F1C, F1D, F1E, F1F, F1N, F1X, G1B, G1C, G1D, G1E, G1F, G1N, or G1X emissions of a frequency in a range of higher than 54 MHz to 960 MHz, or higher than 1,215 MHz to 2,690 MHz, radio stations for land mobile service, and radio stations for portable mobile service (in the case of the radio stations prescribed in the proviso of Article 57, limited to the radio equipment notified separately by the Minister of Internal Affairs and Communications) shall be specified as follows. To specify this, a mark shall be added to the type of radio wave. However, the tolerance for the occupied bandwidth of the radio equipment notified separately by the Minister of Internal Affairs and Communications according to the proviso of Article 57.3 shall be separately notified by the Minister of Internal Affairs and Communications.

- |   |        |
|---|--------|
| 1 Radio equipment whose transmission rate of a modulation signal is 4 kbit/s or lower                 | 4 kHz  |
| 2 Radio equipment whose transmission rate of a modulation signal is higher than 4 kbit/s to 8 kbit/s  | 8 kHz  |
| 3 Radio equipment whose transmission rate of a modulation signal is higher than 8 kbit/s to 16 kbit/s | 16 kHz |

XIV. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radiosondes which use emissions of a frequency of 404.5 MHz shall be 1 MHz.

XV. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio stations which perform MCA land mobile communication and radio stations which perform communication, etc. for testing MCA land mobile communication equipment shall be as follows. To specify this, a mark shall be added to the type of radio wave.

- |  |         |
|--|---------|
| 1 Radio equipment whose frequency shift or frequency deviation is within +/- 2.5 kHz                   | 8.5 kHz |
| 2 Radio equipment whose frequency shift or frequency deviation is higher than +/- 2.5 kHz to +/- 5 kHz | 16 kHz  |

XVI. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio stations which perform digital MCA land mobile communication and radio stations which perform communication, etc. for testing digital MCA land mobile communication equipment shall be specified as follows. To specify this, a mark shall be added to the class of emission.

- 1 Emissions of frequencies in a range of higher than 836 MHz to 838 MHz, higher than 850 MHz to 860 MHz, higher than 891 MHz to 893 MHz, or higher than 905 MHz to 915 MHz  
24.3 kHz
- 2 Emissions of frequencies in a range of higher than 1,453 MHz to 1,477 MHz or higher than 1,501 MHz to 1,525 MHz  
20 kHz

XVII. N.A.

XVIII. N.A.

XIX. N.A.

XX. - XXII. N.A.

XXIII. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio stations using emissions of a frequency in a range of higher than 830 MHz to 887 MHz which perform airport radio telephone communication or radio stations which perform communication, etc. for testing airport radio telephone communication equipment shall be 8.5 kHz.

XXIV. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of land mobile stations of specified radio microphones shall be specified as follows.

- 1 Radio equipment whose frequency shift is within +/- 40 kHz  
110 kHz
- 2 Radio equipment whose frequency shift is higher than +/- 40 kHz to +/- 150 kHz  
330 kHz
- 3 Radio equipment of stereo transmission system  
250 kHz

XXV. The tolerance for the occupied bandwidth of the radio equipment (excluding that prescribed in III to XIX and in XXI and XXII) of radio stations notified separately by the Minister of Internal Affairs and Communications according to the proviso of Article 58 shall be separately specified. To specify this, a mark shall be added to the type of radio wave.

XXVI. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio stations of cordless telephones shall be 8.5 kHz.

XXVII. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio stations of digital cordless telephones, land mobile stations of PHS, base stations of PHS, radio stations which relay communication between base stations of PHS and land mobile stations, or radio stations which perform communication, etc. for testing communication equipment of PHS shall be as follows.

- 1) Radio equipment that uses emissions of a frequency of higher than 1,893.5 MHz to 1,919.6 MHz:  
288 kHz

- 2) Radio equipment that uses emissions of a frequency of higher than 1,884.5 MHz to 1,893.5 MHz: 884 kHz

XXVIII. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of specified low-power radio stations shall be 8.5 kHz. However, the tolerance for the occupied bandwidth of the radio equipment notified separately by the Minister of Internal Affairs and Communications because it is difficult or unreasonable to apply this value to the said radio equipment shall be based on the value notified separately by the Minister of Internal Affairs and Communications.

XXIX. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio stations of low-power security systems shall be 16 kHz.

XXX. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio stations of low-power data-based communication systems shall be as follows.

- 1) Radio equipment which uses emissions of a frequency from 2,400 MHz to 2,483.5 MHz or from 2,471 MHz to 2,497 MHz
  - (1) Radio equipment that uses 2,400 MHz or higher to 2,483.5 MHz and uses the frequency hopping method, direct spread method, and a combination of the frequency hopping method and direct spread method, or a combination of OFDM and the frequency hopping method; 83.5 MHz
  - (2) Radio equipment that uses OFDM method and other than those specified in (1) above; 38 MHz
  - (3) Radio equipment that uses methods other than those specified in (1) and (2) above; 26 MHz
- 2) Radio equipment that uses emissions of a frequency of 5,180 MHz, 5,190 MHz, 5,200 MHz, 5,220MHz, 5,230 MHz, 5,240 MHz, 5,260 MHz, 5,270 MHz, 5,280 MHz, 5,300 MHz, 5,310 MHz, or 5,320 MHz;
  - (1) Radio equipment that uses emissions of a frequency of 5,190 MHz, 5,230 MHz, 5,270 MHz, or 5,310 MHz and uses the OFDM method (limited to radio equipment uses an occupied frequency band-width which is more than 19 MHz); 38 MHz
  - (2) Radio equipment that uses emissions of a frequency of 5,180 MHz, 5,200 MHz, 5,220MHz, 5,240 MHz, 5,260 MHz, 5,280 MHz, 5,300 MHz, or 5,320 MHz and uses the OFDM method: 19 MHz
  - (3) Radio equipment that uses emissions of a frequency of 5,180 MHz, 5,200 MHz, 5,220MHz, 5,240 MHz, 5,260 MHz, 5,280 MHz, 5,300 MHz, or 5,320 MHz and uses

methods other than those specified in (2) above; 18 MHz

- 3) Radio equipment that uses emissions of a frequency of 5,500 MHz, 5,510 MHz, 5,520 MHz, 5,540 MHz, 5,550 MHz, 5,560 MHz, 5,580 MHz, 5,590 MHz, 5,600 MHz, 5,620 MHz, 5,630 MHz, 5,640 MHz, 5,660 MHz, 5,670 MHz, 5,680 MHz, or 5,700 MHz;

- (1) Radio equipment that uses emissions of a frequency of 5,510 MHz, 5,550 MHz, 5,590 MHz, 5,630 MHz, or 5,670 MHz and uses the OFDM method (limited to radio equipment uses an occupied frequency band-width which is more than 19.7 MHz); 38 MHz

- (2) Radio equipment that uses emissions of a frequency of 5,500 MHz, 5,520 MHz, 5,540 MHz, 5,560 MHz, 5,580 MHz, 5,600 MHz, 5,620 MHz, 5,640 MHz, 5,660 MHz, 5,680 MHz, or 5,700 MHz; 19.7 MHz

- 4) Radio equipment that uses emissions of a frequency which is 24.77 GHz or higher to 25.23 GHz and which is 24.77 GHz or an integer multiple of 10 MHz added to 24.77 GHz, or that uses emissions of a frequency which is 27.02 GHz or higher to 27.46 GHz and which is 27.02 GHz or an integer multiple of 10 MHz added to 27.02 GHz

18 + 20 (n-1) MHz

Note: n represents the number of unit radio channels that are used simultaneously as one radio channel.

XXXI. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of aircraft earth stations which using radio signals at frequencies greater than 1,626.5 MHz but no more than 1,660.5 MHz (limited to radio equipment capable of high-speed radio data communications) shall be separately specified. To specify this, a mark shall be added to the type of radio wave..

- (1) Transmission speed of the modulation signal is 3,000 bits per second: 60 kHz

- (2) Transmission speed of the modulation signal is 134,400 bits per second: 40 kHz

- (3) Transmission speeds other than (1) and (2) above: 5.6 kHz

XXXII. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of broadcasting stations which perform digital broadcasting among VHF broadcasting which uses class X7W emissions shall be the value obtained from  $(6000/14 \times n + 38.48)$  kHz whose fractions below the decimal point are rounded up to the nearest whole number.

Note that n is the number of OFDM included in the OFDM frame of Article 4.5 paragraph 3 “Standard method of transmission concerning digital broadcasting among standard television broadcasting, etc.”

XXXIII. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio stations in the land mobile service using emissions of a frequency of 22 GHz, 26 GHz, or 38 GHz subscriber radio access communication, and radio stations which perform the radio access communication prescribed in Article 7 paragraph 25 item 2 shall be of a value notified separately by the Minister of Internal Affairs and Communications.

XXXIV. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of fixed stations for telecommunication service which use emissions of a frequency of 22 GHz shall be as follows.

- 1 Radio equipment which uses class F9W emissions
  - (1) Radio equipment in which the signal for correcting errors is not added to a modulation signal 8.2 MHz
  - (2) Radio equipment in which the signal for correcting errors is added to a modulation signal 16.4 MHz
- 2 Radio equipment which uses class G7W emissions
  - (1) Radio equipment in which the signal for correcting errors is not added to a modulation signal 6.6 MHz
  - (2) Radio equipment in which the signal for correcting errors is added to a modulation signal 13.2 MHz
- 3 Radio equipment which uses class D7W emissions 37.2 MHz

XXXV. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of fixed stations for telecommunication service which use emissions of a frequency of 38 GHz shall be as follows.

- (1) Radio equipment in which the signal for correcting errors is not added to a modulation signal 10.6 MHz
- (2) Radio equipment in which the signal for correcting errors is added to a modulation signal 21.3 MHz

XXXVI. Notwithstanding the values prescribed in I to IV, the permissible value for the occupied bandwidth of the radio equipment of portable mobile earth stations using emissions of a frequency in a range of higher than 148 MHz to 150.05 MHz which perform portable mobile satellite data-based communication shall be 5 kHz.

XXXVII. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio stations of real-number zero-point single side-band modulation method or narrowband digital communication method shall be specified as follows. To specify

this, a mark shall be added to the type of radio wave. However, the occupied bandwidth of the radio equipment of radio stations notified separately by the Minister of Internal Affairs and Communications according to the proviso of Article 57.3.2 shall be separately notified by the Minister of Internal Affairs and Communications.

1	Radio equipment whose channel interval is 6.25 kHz	5.8 kHz
2	Radio equipment whose channel interval is 12.5 kHz	11.5 kHz
3	Radio equipment whose channel interval is 25 kHz	24.3 kHz

XXXVIII. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of vehicle sensing radio beacon land stations shall be 672 kHz.

XXXIX. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio station which perform road traffic information communication shall be 85 kHz.

XXXX. Notwithstanding the values prescribed in I to IV, the permissible value for the occupied bandwidth of the radio equipment of portable mobile earth stations which use emissions of a frequency from 1,621.35 MHz to 1,626.5 MHz or from 2,660 MHz to 2,690 MHz shall be as follows.

(1)	Radio equipment which uses emissions of a frequency from 1,621.35 MHz to 1,626.5 MHz	31.5 kHz
(2)	Radio equipment which uses emissions of a frequency from 2,660 MHz to 2,690 MHz	16 kHz

XXXXI. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio stations for land mobile service which use emissions of a frequency of 2 GHz shall be 4 MHz.

XXXXII. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of radio navigation land stations using emissions of a frequency from 285 kHz to 325 kHz which provide satellite locating error correction information shall be as follows.

1	Radio equipment which uses class G1D emissions	0.23 kHz
2	Radio equipment which uses class D7W emissions (limited to that which is used in common for radio beacon service)	1.5 kHz
3	Radio equipment which uses class D9W emissions (limited to that which is used in common for radio beacon service and special service)	3 kHz

XXXXIII. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied

bandwidth of the radio equipment of the land mobile stations of a narrow-band communication system, the base stations of a narrow-band communication system and the radio stations which perform communication for testing the radio equipment at the land mobile stations of a narrow-band communication system shall be 4.4 MHz.

XXXXIV. Notwithstanding the values prescribed in I to IV, the tolerance for the occupied bandwidth of the radio equipment of fixed stations which perform 1,900 MHz subscriber radio access communication or radio stations which perform communication, etc. for testing 1,900 MHz subscriber radio access communication equipment shall be 288 MHz.

XXXXV Notwithstanding the values prescribed in I to IV, the tolerance of the occupied bandwidth of radio equipment of fixed stations performing city, town, or village digital disaster prevention radio communication which use emissions of a frequency in a range of higher than 54 MHz to 70 MHz shall be 15 kHz.

XXXXVI Notwithstanding the values prescribed in I to IV, the tolerance of the occupied bandwidth of radio equipment of radio stations performing aeronautical mobile service which use G1D emissions of a frequency from 118 MHz to 137 MHz shall be 16.8 kHz.

XXXXVII Notwithstanding the values prescribed in I to IV, the tolerance of the occupied bandwidth of radio equipment of radio stations of an access system in the 5 GHz band shall be as follows.

1	40 MHz system	38 MHz
2	20 MHz system	19.7 MHz
3	10 MHz system	9 MHz
4	5 MHz system	4.5 MHz

XXXXVIII Notwithstanding the provisions of I to IV, the permissible values for bandwidths occupied by the radio equipment of radio stations for land mobile service using emissions of a frequency in the 18 GHz band, fixed stations for telecommunications service using emissions of a frequency in the 18 GHz band, and of fixed stations for public service using emissions of a frequency in the 18 GHz band shall be notified separately by the Minister of Internal Affairs and Communications.

XXXXVIII Notwithstanding the values prescribed in I to IV, the tolerance of the occupied bandwidth of radio equipment of radio stations of an Ultra Wide-band Wireless System shall be as follows.

1	Radio equipment which uses emissions of a frequency from 3.4 GHz to 4.8 GHz	1.4 GHz
2	Radio equipment which uses emissions of a frequency from 7.25 GHz to 10.25 GHz	

3 GHz

XXXXX Notwithstanding the values prescribed in I to IV, the tolerance of the occupied bandwidth of radio equipment of radio stations of the fixed stations for Telecommunication Business using emission of a frequency in the 1,500MHz band shall be as follows.

- |   |   |          |
|---|---|----------|
| 1 | Radio equipment with a spread code speed of 1.2288 Mbits/second | 1.48 MHz |
| 2 | Radio equipment with a spread code speed of 3.6864 Mbits/second | 4.6 MHz  |
| 3 | Radio equipment with a spread code speed of 3.84 Mbits/second   | 5 MHz    |

XXXXXI Notwithstanding the values prescribed in I to IV, the tolerance of the occupied bandwidth of radio equipment of radio stations of the orthogonal frequency division multiple access broad band wireless access system or radio stations performing communications, etc., for testing for orthogonal frequency division multiple access broad band wireless access system shall be as follows. To specify this, a mark shall be added to the type of radio wave.

- |   |   |         |
|---|---|---------|
| 1 | Radio equipment with a burst length of 5 msec.  |         |
|   | (1) Radio equipment with a channel spacing of 5 MHz   | 4.9 MHz |
|   | (2) Radio equipment with a channel spacing of 10 MHz  | 9.9 MHz |
| 2 | Radio equipment with a burst length are values of natural number multiple of 911.46 micro seconds or values that added 1,070 micro seconds to natural number multiple of 911.46 micro seconds |         |
|   | (1) Radio equipment with a channel spacing of 5 MHz   | 4.9 MHz |
|   | (2) Radio equipment with a channel spacing of 10 MHz  | 9.5 MHz |

XXXXXII Notwithstanding the values prescribed in I to IV, the tolerance of the occupied bandwidth of radio equipment of radio stations of the time division/orthogonal frequency division multiple access broad band wireless access system or radio stations performing communications, etc., for testing for time division/orthogonal frequency division multiple access broad band wireless access system shall be as follows. To specify this, a mark shall be added to the type of radio wave.

- |   |   |         |
|---|---|---------|
| 1 | Radio equipment with a channel spacing of 2.5 MHz | 2.4 MHz |
| 2 | Radio equipment with a channel spacing of 5 MHz   | 4.8 MHz |
| 3 | Radio equipment with a channel spacing of 10 MHz  | 9.6 MHz |

XXXXXIII Notwithstanding the values prescribed in I to IV, the tolerance of the occupied

bandwidth of radio equipment of radio stations of the time division/frequency division multiple access broad band wireless access system or radio stations performing communications, etc., for testing for time division/frequency division multiple access broad band wireless access system shall be 600 kHz.

**Table 3 (related to Article 7)**

1 The terms used in this table are defined as follows:

- (1) “Permissible value of spurious emission intensity” refers to the permissible value defined according to the mean power of the spurious emissions of each non-modulated frequency supplied to the feeder.
- (2) “Permissible value of the unwanted emission intensity” refers to the permissible value defined according to the mean power of unwanted emissions (peak envelope power for the transmitting equipment (excluding those using real number zero-point single-sideband modulation) at radio stations performing radio-determination, amateur station using emissions of a frequency of 30 MHz or lower and radio stations using single-sideband (limited only to mobile stations or radio stations other than broadcasting stations using emissions of a frequency of 30 MHz or lower)) of each modulated frequency supplied to the feeder; except for those otherwise prescribed.
- (3) “Carrier power” refers to the power prescribed in Article 2.1 item 71 of the Enforcement Regulations; provided, however, that it refers to the mean power of the modulated carrier, when the non-modulated carrier cannot be emitted as in the digital modulation.
- (4) “Reference bandwidth” refers to the frequency bandwidth for defining the permissible value of the intensity of unwanted radiations in the spurious domain.
- (5) “BN” refers to the necessary frequency bandwidth used to calculate frequencies at the boundaries of the out-of-band domain and spurious domain. The necessary frequency bandwidth in this case shall be the permissible value of the occupied frequency bandwidth; provided, however, that the necessary frequency bandwidth for the following cases shall be as given below:
  - a. The necessary frequency bandwidth for transmitting equipment for which the channel interval is prescribed can be the channel interval.
  - b. The necessary frequency bandwidth for transmitting equipment for which the designated frequency band is specified can be the value of the designated frequency band.
  - c. The necessary frequency bandwidth for transmitting equipment which is based on the common-amplifier system that supplies power to two or more main carriers from a single power amplifier and which performs common amplification to two or more successive carriers (limited only to cases where they are arranged at an uniform or equal interval) (excluding the transmitting equipment at broadcasting

stations) can be the value obtained by the following expression.

$$B_o = b_o + (m-1) \Delta F$$

$B_o$ : Necessary frequency bandwidth per system in 1 above.

$b_o$ : Permissible value of the occupied frequency bandwidth per carrier in 1 above.

$m$ : Number of carriers

$\Delta F$ : Difference between the central frequency of the carrier in 1 above and the central frequency of the adjacent carrier

(6) “ $f_c$ ” refers to the central frequency (the frequency at the center of the necessary frequency bandwidth).

2 The permissible value of the intensity of spurious emissions or the permissible value of the intensity of unwanted emissions shall be as follows:

(1) The permissible value of the intensity of spurious emissions in the out-of-band domain and the permissible value of the intensity of unwanted emissions in the spurious domain:

Basic frequency band	Antenna power	Permissible value of the intensity of spurious emissions in the out-of-band domain	Permissible value of the intensity of unwanted emissions in the spurious domain
30 MHz or lower	Higher than 50 W	A value 50 mV (200 mW for the transmitting equipment at ship stations and portable stations used in ships) or lower and which is 40 dB lower than the mean power of the basic frequency; however, a value 50 dB lower for the transmitting equipment of fixed stations and land stations	A value 60 dB lower than the carrier power of the basic frequency.
	5 W - 50 W		50 $\mu$ W or lower
	1 W - 5 W		50 $\mu$ W or lower; however, a value 50 dB lower than the peak envelope power of the basic frequency for the transmitting equipment of fixed stations and land stations (excluding coast

		(excluding coast stations) using single-sideband	stations) using single-sideband
	1 W or lower	1 mW or lower	50 $\mu$ W or lower
30 MHz - 54 MHz	Higher than 50 W	A value 1 mW or lower and 60 dB lower than the mean power of the basic frequency	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
	1 W - 50 W		A value 60 dB lower than the carrier power of the basic frequency
	1 W or lower	100 $\mu$ W or lower	50 $\mu$ W or lower
54 MHz - 70 MHz	Higher than 50 W	A value 1 mW or lower and which is 80 dB lower than the mean power of the basic frequency	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
	1 W - 50 W		A value 60 dB lower than the carrier power of the basic frequency
	1 W or lower	100 $\mu$ W or lower	50 $\mu$ W or lower
70 MHz - 142 MHz, 144 MHz - 146 MHz	Higher than 50 W	A value 1mW or lower and which is 60 dB lower than the mean power of the basic frequency	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
	1 W - 50 W		A value 60 dB lower than the carrier power of the basic frequency
	1 W or lower	100 $\mu$ W or lower	50 $\mu$ W or lower
142 MHz - 144 MHz, 146 MHz - 162.0375 MHz	Higher than 50 W	A value 1 mW or lower and which is 80 dB lower than the mean power of the basic frequency	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
	1 W - 50 W		A value 60 dB lower than the carrier power of the basic frequency

	1 W or lower	100 $\mu$ W or lower	50 $\mu$ W or lower
162.0375 MHz - 335.4 MHz	Higher than 50 W	A value 1 mW or lower and which is 60 dB lower than the mean power of the basic frequency	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
	1 W - 50 W		A value 60 dB lower than the carrier power of the basic frequency
	1 W or lower	100 $\mu$ W or lower	50 $\mu$ W or lower
335.4 MHz - 470 MHz	Higher than 25 W	A value of 1 mW or lower and which is 70 dB lower than the mean power of the basic frequency	A value 70 dB lower than the carrier power of the basic frequency
	1 W - 25 W	2.5 $\mu$ W or lower	2.5 $\mu$ W or lower
	1 W or lower	25 $\mu$ W or lower	25 $\mu$ W or lower
470 MHz - 960 MHz	Higher than 50 W	A value 20 mW or lower and which is 60 dB lower than the mean power of the basic frequency	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
	25 W - 50 W		A value 60 dB lower than the carrier power of the basic frequency
	1 W - 25 W	25 $\mu$ W or lower	25 $\mu$ W or lower
	1 W or lower	100 $\mu$ W or lower	50 $\mu$ W or lower
Higher than 960 MHz	Higher than 10 W	A value 100 mW or lower and which is 50 dB lower than the mean power of the basic frequency	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
	10 W or lower	100 $\mu$ W or lower	50 $\mu$ W or lower

Note: The antenna power shall be the value of the mean power.

(2) The reference bandwidth shall be as follows:

Frequency band in the spurious domain	Reference bandwidth
---------------------------------------	---------------------

Higher than 9 kHz but no more than 150 kHz	1 kHz
Higher than 150 kHz but no more than 30 MHz	10 kHz
Higher than 30 MHz but no more than 1 GHz	100 kHz
Higher than 1 GHz	1 MHz

(3) The frequency at the boundary of the out-of-band domain and spurious domain shall be as follows:

Frequency range	Conditions for necessary frequency bandwidth	Frequency at the boundary of the out-of-band domain and spurious domain
9 kHz < $f_c$ $\leq$ 150 kHz	$BN < 250$ Hz	$f_c \pm 625$ Hz
	250 Hz $\leq$ $BN \leq$ 10 kHz	$f_c \pm 2.5BN$
	$BN > 10$ kHz	$f_c \pm (1.5BN + 10$ kHz)
150 kHz < $f_c \leq$ 30 MHz	$BN < 4$ kHz	$f_c \pm 10$ kHz
	4 kHz $\leq$ $BN \leq$ 100 kHz	$f_c \pm 2.5BN$
	$BN > 100$ kHz	$f_c \pm (1.5BN + 100$ kHz)
30 MHz < $f_c \leq$ 1 GHz	$BN < 25$ kHz	$f_c \pm 62.5$ kHz
	25 kHz $\leq$ $BN \leq$ 10 MHz	$f_c \pm 2.5BN$
	$BN > 10$ MHz	$f_c \pm (1.5BN + 10$ MHz)
1 GHz < $f_c \leq$ 3 GHz	$BN < 100$ kHz	$f_c \pm 250$ kHz
	100 kHz $\leq$ $BN \leq$ 50 MHz	$f_c \pm 2.5BN$
	$BN > 50$ MHz	$f_c \pm (1.5BN + 50$ MHz)
3 GHz < $f_c \leq$ 10 GHz	$BN < 100$ kHz	$f_c \pm 250$ kHz
	100 kHz $\leq$ $BN \leq$ 100 MHz	$f_c \pm 2.5BN$
	$BN > 100$ MHz	$f_c \pm (1.5BN + 100$ MHz)
10 GHz < $f_c \leq$ 15 GHz	$BN < 300$ kHz	$f_c \pm 750$ kHz
	300 kHz $\leq$ $BN \leq$ 250 MHz	$f_c \pm 2.5BN$
	$BN > 250$ MHz	$f_c \pm (1.5BN + 250$ MHz)
15 GHz < $f_c \leq$ 26 GHz	$BN < 500$ kHz	$f_c \pm 1.25$ MHz
	500 kHz $\leq$ $BN \leq$ 500 MHz	$f_c \pm 2.5BN$
	$BN > 500$ MHz	$f_c \pm (1.5BN + 500$ MHz)
$f_c > 26$ GHz	$BN < 1$ MHz	$f_c \pm 2.5$ MHz
	1 MHz $\leq$ $BN \leq$ 500 MHz	$f_c \pm 2.5BN$

	BN>500 MHz	$fc \pm (1.5BN + 500 \text{ MHz})$
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Note 1 The frequency at the boundary of the out-of-band domain and spurious domain shall be included in the frequency in the spurious domain.

2 Where the frequency (including the necessary frequency bandwidth) of the emissions to be generated extends across two or more frequency ranges, the value prescribed as the upper limit frequency range shall apply.

3 Notwithstanding the values prescribed in this table, the following shall apply to the transmitting equipment at radio stations which perform the fixed satellite service and broadcasting satellite service using emissions of frequencies given below and which satisfy the conditions for the necessary frequency bandwidth:

Frequency used	Service	Conditions for necessary frequency bandwidth	Frequency at the boundary of the out-of-band domain and spurious domain
3.4 GHz - 4.2 GHz	Fixed satellite service	BN>250 MHz	$fc \pm (1.5BN + 250 \text{ MHz})$
5.725 GHz - 6.725 GHz	Fixed satellite service	BN>500 MHz	$fc \pm (1.5BN + 500 \text{ MHz})$
7.25 GHz - 7.75 GHz, 7.9 GHz - 8.4 GHz	Fixed satellite service	BN>250 MHz	$fc \pm (1.5BN + 250 \text{ MHz})$
10.7 GHz - 12.75 GHz	Fixed satellite service, Broadcasting satellite service	BN>500 MHz	$fc \pm (1.5BN + 500 \text{ MHz})$
12.75 GHz - 13.25 GHz	Fixed satellite service	BN>500 MHz	$fc \pm (1.5BN + 500 \text{ MHz})$
13.75 GHz - 14.8 GHz	Fixed satellite service	BN>500 MHz	$fc \pm (1.5BN + 500 \text{ MHz})$

3 Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of transmitting equipment which uses the emission of frequency of 30 MHz or lower and the mean power of the basic frequency of which is 50 kW or higher and which is to be used by switching the frequency range of one octave or more shall be with its mean power of 50 mW or lower as best as possible, and a value 60 dB lower than the mean power of the basic frequency (carrier power for unwanted emissions in the spurious domain).

4 Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of transmitting equipment based on multiple communication

channels using emissions of a frequency higher than 30 MHz but no more than 470 MHz shall be as follows:

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 50 W	A value 1 mW or lower and which is 60 dB lower than the mean power of the basic frequency	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
Higher than 25 W but no more than 50 W		A value 60 dB lower than the carrier power of the basic frequency
Higher than 1 W but no more than 25 W	25 $\mu$ W or lower	25 $\mu$ W or lower
1 W or lower	100 $\mu$ W or lower	50 $\mu$ W or lower

5 The permissible values of the spurious emission intensity or unwanted emission intensity of the transmitting equipment at broadcasting stations shall be as follows:

- (1) Notwithstanding the values prescribed in 2 (1) and 3, the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment at broadcasting stations performing AM broadcasting shall be as follows:

Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
A value 50 mW or lower and which is 40 dB lower than the mean power of the basic frequency	A value 50 mW or lower and which is 50 dB lower than the carrier power of the basic frequency

- (2) Notwithstanding the values prescribed in 2 (1) and (3) as well as 3, the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain as well as the frequency at the boundary of the out-of-band domain and spurious domain of the transmitting equipment at broadcasting stations performing HF broadcasting shall be as follows:

- a. The permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain

Permissible value of the spurious emission	Permissible value of the unwanted emission

intensity in the out-of-band domain	intensity in the spurious domain
A value 50 mW or lower and which is 40 dB lower than the mean power of the basic frequency	A value 50 mW or lower and which is 50 dB lower than the carrier power of the basic frequency

b. Frequency at the boundary of the out-of-band domain and spurious domain

(a) Transmitting equipment using A3E emissions

$f_c \pm 22.5 \text{ kHz}$

(b) Transmitting equipment using H3E emissions

$f_c \pm 11.25 \text{ kHz}$

(3) Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment at broadcasting stations performing VHF broadcasting (excluding digital broadcasting), VHF sound multiplex broadcasting or VHF teletex broadcasting shall be as follows:

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 250 W	A value 1 mW or lower and which is 60 dB lower than the mean power of the basic frequency	A value 1 mW or lower and which is 70 dB lower than the mean power of the basic frequency
1 W - 250 W		25 $\mu$ W or lower
1 W or lower	100 $\mu$ W or lower	

(4) Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment at broadcasting stations performing digital broadcasting among VHF broadcasting (excluding those performing satellite supplementary broadcasting) shall be as follows:

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 500 W	A value 1 mW or lower and which is 60 dB lower than the mean power of the basic frequency	A value 70 dB lower than the mean power of the basic frequency

Higher than 1 W but no more than 500 W	frequency	50 $\mu$ W or lower
1 W or lower	100 $\mu$ W or lower	

(5) Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment at broadcasting stations performing standard television broadcasting (excluding digital broadcasting), standard television sound multiplex broadcasting, standard television teletext broadcasting, and standard television data multiplex broadcasting (excluding transmitting equipment using emissions of a frequency from 11.7 GHz to 12.2 GHz) shall be as follows:

Basic frequency band	Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 90 MHz but no more than 108 MHz and higher than 170 MHz but no more than 222 MHz	Higher than 42 W	A value 1 mW or lower and which is 60 dB lower than the mean power of the basic frequency of the video transmitting equipment	A value 1 mW or lower and which is 60 dB lower than the mean power of the basic frequency of the video transmitting equipment
	Higher than 1.68 W but no more than 42 MHz		25 $\mu$ W or lower
	1.68 W or lower	100 $\mu$ W or lower	
Higher than 470 MHz but no more than 770 MHz	Higher than 42 W	A value 20 mW or lower and which is 60 dB lower than the mean power of the basic frequency of the video transmitting equipment	A value 12 mW or lower and 60 dB lower than the mean power of the basic frequency of the video transmitting equipment
	Higher than 1.68 W but no more than 42	25 $\mu$ W or lower	25 $\mu$ W or lower

	MHz		
	1.68 W or lower	100 $\mu$ W or lower	

Note: The antenna power shall be the value of the peak envelope power of the video transmitting equipment.

- (6) Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment at broadcasting stations performing digital broadcasting or high-definition television broadcasting among standard television broadcastings shall be as follows: provided, however, that the values prescribed in Figure 4.8.8 shall apply mutatis mutandis to the permissible value of the spurious emission intensity in the out-of-band domain of transmitting equipment whose antenna power is higher than 8 kW.

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 25 W	A value 20 mW or lower and 60 dB lower than the mean power of the basic frequency	A value 12 mW or lower and 60 dB lower than the mean power of the basic frequency
Higher than 1 W but no more than 25 W	25 $\mu$ W or lower	25 $\mu$ W or lower
1 W or lower	100 $\mu$ W or lower	

- 6 Notwithstanding the values prescribed in 2 (1) and 5 (5), the permissible value of the spurious emission (limited only to those generated by the inter-modulation of the color signal sub carrier and the sound signal carrier) in the out-of-band domain of the transmitting equipment based on the system that concurrently amplifies the video signal carrier and sound signal carrier shall be a value 40 dB lower than the mean power of the video signal carrier.
- 7 Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment at ship stations, on-board communication stations, aircraft stations using F1D emissions, F2B emissions or F3E emissions of a frequency higher than 30 MHz but no more than 335.4 MHz and portable stations installed and used on ships or aircrafts and which uses emissions of a frequency listed

in Table 18 of the appendix of Radio Regulations shall be as follows:

Frequency band	Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 146 MHz but no more than 162.0375 MHz	Higher than 400 W	2.5 x (P/20) $\mu$ W or lower	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
	Higher than 20 W but no more than 400 W		2.5 x (P/20) $\mu$ W or lower
	Higher than 1 W but no more than 20 W	2.5 $\mu$ W or lower	2.5 $\mu$ W or lower
	1 W or lower	100 $\mu$ W or lower (Note 2)	50 $\mu$ W or lower
Frequency bands other than the above	Higher than 400 W	10 x (P/20) $\mu$ W or lower	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
	Higher than 20 W but no more than 400 W		10 x (P/20) $\mu$ W or lower
	Higher than 1 W but no more than 20 W	10 $\mu$ W or lower	10 $\mu$ W or lower
	1 W or lower	100 $\mu$ W or lower (Note 2)	50 $\mu$ W or lower

Note 1 P represents the value of the mean power of the basic frequency.

2 The provision of the permissible value of the spurious emission intensity in the out-of-band domain shall not apply to ship stations.

8 Notwithstanding the values prescribed in 2 (1) and 3, the permissible value of unwanted emission intensity in the out-of-band domain of the transmitting equipment of the radio equipment of ship stations or coast stations that perform communications with the narrow-band direct printing (NBDP) telegraph and which uses emissions of a frequency from 1,606.5 kHz to 26,175 kHz shall be the values of the curve which the attenuation of the

unwanted emissions against the mean power upon emitting F1B emissions gives in Figure 4.10.

- 9 Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment at radio stations which perform aeronautical mobile service using emissions of a frequency from 118 MHz to 142 MHz and whose mean power is 25 W or lower shall be as follows:

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 1 W but no more than 25 W	25 $\mu$ W or lower	25 $\mu$ W or lower
1 W or lower	100 $\mu$ W or lower	50 $\mu$ W or lower

- 10 Notwithstanding the values prescribed in 2 (1) and 4, the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment at radio stations performing aeronautical mobile service, radio stations performing broadcast relaying and amateur stations which use emissions of a frequency higher than 335.4 MHz but no more than 470 MHz shall be as follows:

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 50 W	A value 1 mW or lower and 60 dB lower than the mean power of the basic frequency	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
Higher than 1 W but no more than 50 W		A value 60 dB lower than the carrier power of the basic frequency
1 W or lower	100 $\mu$ W or lower	50 $\mu$ W or lower

- 11 Notwithstanding the values prescribed in 2 and 3, the permissible value of the unwanted emission intensity of the transmitting equipment at aircraft stations and aeronautical stations

using J3E emissions of a frequency of 28 MHz or lower and at aircraft stations using J2D emissions (limited only to the frequencies of aeronautical mobile (R) service) of a frequency of 22 MHz or lower shall be as follows. The values prescribed in 2 (2) shall apply mutatis mutandis to the reference bandwidth in this case.

Frequency interval from the assigned frequency	Permissible value of unwanted emission intensity
1.5 kHz or higher but less than 4.5 kHz	A value 30 dB lower than the peak envelope power of the basic frequency
4.5 kHz or higher but less than 7.5 kHz	A value 38 dB lower than the peak envelope power of the basic frequency.
7.5 kHz or higher	A value 43 dB lower than the peak envelope power of the basic frequency; provided, however, that a value 60 dB lower than the carrier power of the basic frequency shall apply to aeronautical stations whose antenna power is higher than 50 W and a value of 50 $\mu$ W or lower shall apply to those whose antenna power is lower than 50 W.

- 12 The permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment on survival boats and rescue crafts, two-way radio telephony, two-way radio telephony between ships and aircrafts, search and rescue radar transponders and emergency locator transmitters shall not apply.
- 13 Notwithstanding the values prescribed in 2, 7, 9, and 10, the permissible value of the spurious emission intensity of satellite emergency position-indicating radio beacons, emergency locator transmitters and airborne portable radio equipment which use emissions of a frequency of 406 MHz to 406.1 MHz and of 121.5 MHz shall be values separately notified by the Minister of Internal Affairs and Communications.
- 14 Notwithstanding the values prescribed in 2, the permissible value of the spurious emission intensity of the transmission equipment of INMARSAT ship earth stations shall be as follows:
- (1)Transmission equipment of the INMARSAT C-type of INMARSAT ship earth stations

- a. The permissible value of the equivalent isotropic radiated power intensity of modulated spurious emissions (excluding harmonics emissions) of the transmitting equipment of INMARSAT ship earth stations shall be the value of the curve given in Figure 1 in any 3 kHz-width; provided, however, that the permissible value of the spurious emission intensity for each non-modulated frequency in the range where the detuned frequency is 1 MHz or lower shall be as follows:

Detuned frequency	Permissible value of the spurious emission intensity
5 kHz or lower	A value 25 dB lower than the equivalent isotropic radiated power of the basic frequency
Higher than 5 kHz but no more than 100 kHz	A value 45 dB lower than the equivalent isotropic radiated power of the basic frequency
Higher than 100 kHz but no more than 1 MHz	A value 50 dB lower than the equivalent isotropic radiated power of the basic frequency

- b. The permissible value of the harmonics emission intensity (limited only to those of frequencies of 18 GHz and lower) shall be a value whose equivalent isotropic radiated power is  $-25$  dB W or lower.

(2) Transmitting equipment of the INMARSAT B-type of INMARSAT ship earth stations

- a. The permissible value of the equivalent isotropic radiated power intensity of modulated spurious emissions (excluding harmonics emissions) of the transmitting equipment of INMARSAT ship earth stations shall be the value of the curve given in Figure 1 in any 4 kHz-width; provided, however, that the permissible value of the spurious emission intensity for each modulated frequency in the frequency band from 1,626.4 MHz to 1,646.6 MHz shall be a value 60 dB lower than the equivalent isotropic radiated power of the non-modulated basic frequency for those whose detuned frequency is higher than 100 kHz (500 kHz when performing communication using the high-speed radio data).
- b. The permissible value of the harmonics emission (limited only to those of a frequency of 18 GHz or lower) intensity shall be a value whose equivalent isotropic radiated power is  $-23$  dBW or lower.

(3) Transmitting equipment of the INMARSAT M-type of INMARSAT ship earth stations

- a. The permissible value of the equivalent isotropic radiated power intensity of modulated spurious emissions (excluding harmonics emissions) of the transmitting equipment of INMARSAT ship earth stations shall be as follows according to the type of radio equipment:
- (a) Radio equipment of the standard tuning range type

The permissible value shall be the values of the curve given in Figure 1 in any 4 kHz

width; provided, however, that the permissible value of the spurious emission intensity for each modulated frequency in the frequency band from 1,626.4 MHz to 1,646.6 MHz shall be a value 60 dB lower than the equivalent isotropic radiated power of the non-modulated basic frequency for those whose detuned frequency is higher than 100 kHz.

(b) Transmitting equipment of the limited tuning range type

The permissible value shall be the values of the curve given in Figure 1 in any 4 kHz width; provided, however, that the permissible value of the spurious emission intensity for each modulated frequency in the frequency band from 1,631.4 MHz to 1,646.6 MHz shall be a value 60 dB lower than the equivalent isotropic radiated power of the non-modulated basic frequency for those whose detuned frequency is higher than 100 kHz.

- b. The permissible value of the harmonics emission (limited only to those of a frequency of 18 GHz or lower) intensity shall be a value whose equivalent isotropic radiated power is  $-23$  dBW or lower.

(4) Transmitting equipment of the INMARSAT F-type of INMARSAT ship earth stations

- a. The permissible value of the equivalent isotropic radiated power intensity of modulated spurious emissions (excluding harmonics emissions) of the transmitting equipment of INMARSAT ship earth stations shall be the value of the curve given in Figure 1 in any 4 kHz-width; provided, however, that the permissible value of the spurious emission intensity for each modulated frequency in the frequency band from 1,626.4 MHz to 1,660.6 MHz shall be a value 60 dB lower than the equivalent isotropic radiated power of the non-modulated basic frequency for those whose detuned frequency is higher than 100 kHz.
- b. The permissible value of the harmonics emission (limited only to those of a frequency of 18 GHz or lower) intensity shall be a value whose equivalent isotropic radiated power is  $-23$  dBW or lower.

- 15 Notwithstanding the values prescribed in 2, the permissible value of the spurious emission intensity in the out-of-band domain (excluding those whose basic frequency is 470 MHz or lower), and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment at radio stations the mean power of whose basic frequency is 1 W or higher and which perform the radio determination service shall be as follows; provided, however, that the reference bandwidth and the frequency at the boundary of the out-of-band domain and spurious domain of the primary radar (which refers to equipment for radio determination based on the comparison of the radio signal reflected from the position where the determination is to be made and the reference signal) shall be the values separately

notified by the Minister of Internal Affairs and Communications.

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 50 W	A value 40 dB lower than the mean power of the basic frequency	A value 60 dB lower than the peak envelope power of the basic frequency
50 W or lower		50 $\mu$ W or lower

Note The permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment of the radar shall be the value of the peak envelope power of the unwanted emission for each frequency radiated from the antenna.

16 Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment at paging stations established with the purpose of performing the telecommunication service using emissions of a frequency higher than 273 MHz but no more than 328.6 MHz shall be as follows:

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 25 W	A value 1 mW or lower and 70 dB lower than the mean power of the basic frequency	A value 70 dB lower than the carrier power of the basic frequency
Higher than 1 W but no more than 25 W	2.5 $\mu$ W or lower	2.5 $\mu$ W or lower
1 W or lower	100 $\mu$ W or lower	50 $\mu$ W or lower

17 The permissible value of the intensity of spurious emissions or unwanted emissions of the transmitting equipment at radio stations which perform portable radio communication and radio stations which perform communications, etc. for testing portable radio communication equipment shall be as follows:

(1) Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted

emission intensity in the spurious domain of the transmitting equipment at radio stations which perform TDMA portable radio communication and radio stations which perform communications, etc. for testing TDMA portable radio communication equipment shall be as follows:

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 50 W	A value 2.5 $\mu$ W or lower or 60 dB lower than the mean power of the basic frequency	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
Higher than 1 W but no more than 50 W		2.5 $\mu$ W or lower or a value 60 dB lower than the carrier power of the basic frequency
1 W or lower	25 $\mu$ W or lower	25 $\mu$ W or lower

(2) Notwithstanding the values prescribed in 2, the permissible value of the unwanted emission intensity of the transmitting equipment at radio stations which perform CDMA portable radio communication, radio stations which perform communication, etc. for testing CDMA portable radio communication equipment, radio stations which perform time division/code division multiplexing portable radio communication, radio stations which perform communication, etc. for testing time division/code division multiplexing portable radio communication, radio stations which perform TDMA/CDMA portable radio communication and radio stations which perform communication, etc. for testing TDMA/CDMA portable radio communication shall be the values separately notified by the Minister of Internal Affairs and Communications.

18 Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity of the transmission equipment at radio stations which perform MCA land mobile communication, radio stations which perform communication, etc. for testing MCA land mobile communication equipment, radio stations which perform airport radio telephone communication, radio stations and convenience radio stations which perform communication etc. for testing airport radio telephone communication equipment and which use emissions of a frequency higher than 903 MHz but no more than 905 MHz as well as radio stations in the

land mobile service based on a single communication channel using emissions of an angle-modulated frequency higher than 1,215 MHz but no more than 2,690 MHz (excluding those to which the provision of 17 (1) applies) shall be as follows:

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 50 W	A value 1 mW or lower and which is 60 dB lower than the mean power of the basic frequency	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency
Higher than 1 W but no more than 50 W		A value 60 dB lower than the carrier power of the basic frequency
1 W or lower	25 $\mu$ W or lower	25 $\mu$ W or lower

19 Notwithstanding the values prescribed in 2 (1) and 18, the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmission equipment at radio stations which perform digital MCA land mobile communication, radio stations which perform communication, etc. for testing digital MCA land mobile communication equipment, radio stations based on the real number zero-point single-sideband modulation method or the narrow-band digital communication method using emissions of a frequency higher than 142 MHz but no more than 470 MHz (excluding coast stations, aeronautical stations, experimental radio stations and amateur stations as well as those separately notified by the Minister of Internal Affairs and Communications) as well as fixed stations which perform municipal digital disaster prevention radio communications shall be as follows:

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 50 W	A value 2.5 $\mu$ W or lower and which is 60 dB lower than the mean power of the basic	50 $\mu$ W or lower or a value 70 dB lower than the carrier power of the basic frequency

Higher than 1 W but no more than 50 W	frequency	2.5μW or lower or a value 60 dB lower than the carrier power of the basic frequency
1 W or lower	25 μW or lower	25 μW or lower

20 Notwithstanding the values prescribed in 2 (1) and (3) and 18, the permissible value of the intensity of spurious emissions or unwanted emissions of the transmission equipment at radio stations of digital cordless telephones shall be as follows:

- (1) The permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain

Frequency band	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 1,893.5 MHz but no more than 1,919.6 MHz	250 nW or lower	250 nW or lower
1,893.5 MHz or lower and higher than 1,919.6 MHz	2.5 μW or lower	2.5 μW or lower

Note: The permissible value of the intensity of spurious emissions or unwanted emissions shall be the value of the mean power for the duration of the spurious emissions or unwanted emissions for each frequency supplied to the feeder.

- (2) Frequency at the boundary of the out-of-band domain and spurious domain  
Carrier +/- 996 kHz

21 Notwithstanding the values prescribed in 2 and 18, the permissible value of the unwanted emission intensity of the transmitting equipment of PHS land mobile stations, PHS base stations, radio stations which relay communication between PHS base stations and land mobile stations and radio stations which perform communication, etc. for testing PHS communication equipment shall be as follows:

- (1) The permissible value of unwanted emission intensity in the spurious domain  
a For the land mobile station prescribed in Article 16, Item 1-2 of Regulations for Enforcement of the Radio Law

Frequency band	Permissible value of unwanted emission intensity in the spurious domain
a 1,884.5 MHz to 1,919.6 MHz	The mean power in any 1 MHz bandwidth is 794 nW or lower.
b Less than 1,884.5 MHz and higher than 1,919.6 MHz (excluding the frequencies given in c and d) (Note 1)	The mean power in any 1 MHz bandwidth is 794 nW or lower.
c 815 MHz to 845 MHz, 860 MHz to 890 MHz, 898 MHz to 901 MHz, 915 MHz to 925 MHz, 1,427.9 MHz to 1,452.9 MHz, 1,475.9 MHz to 1,500.9 MHz, 1,749.9 MHz to 1,784.9 MHz, 1,844.9 MHz to 1,879.9 MHz, and 2,010 MHz to 2,025 MHz (Note 1)	The mean power in any 1 MHz bandwidth is 251 nW or lower.
d 1,920 MHz to 1,980 MHz, and 2,110 MHz to 2,170 MHz (Note 1)	The mean power in any 1 MHz bandwidth is 79.4 nW or lower.

b For other than prescribed in a

Frequency band	Permissible value of unwanted emission intensity in the spurious domain
a 1,884.5 MHz to 1,919.6 MHz	The mean power in any 1 MHz bandwidth is 794 nW or lower.
b Less than 1,884.5 MHz and higher than 1,919.6 MHz (excluding the frequencies given in c ) (Note 1)	The mean power in any 1 MHz bandwidth is 794 nW or lower.
c 1,920 MHz to 1,980 MHz, and 2,110 MHz to 2,170 MHz (Note 1)	The mean power in any 1 MHz bandwidth is 251 nW or lower.

Note 1 Limited only to the frequency band in which the detuned frequency is 2.25 MHz or higher.

- 2 The permissible value of the intensity of unwanted emissions shall be the value of the mean power for the duration of the unwanted emission for each frequency supplied to the feeder.

(2) Frequency at the boundary of the out-of-band domain and the spurious domain

- a. Transmitting equipment whose occupied frequency bandwidth is 288 kHz or lower  
Carrier +/- 996 kHz

- b. Transmitting equipment whose occupied frequency bandwidth is higher than 288 kHz  
Carrier +/- 1,296 kHz

22 Notwithstanding the values prescribed in 2 (1) and 18, the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmission equipment at land mobile stations using a specified radio microphone, radio stations of cordless telephones, premises radio stations using emissions of a frequency higher than 1,215 MHz but no more than 1,260 MHz, specified low-power radio stations using emissions of a frequency higher than 73.6 MHz but no more than 1,260 MHz (excluding a frequency higher than 312 MHz but no more than 315.25 MHz, higher than 433.67 MHz but no more than 434.17 MHz, and higher than 952 MHz but no more than 955 MHz) higher than 10.5 GHz but no more than 10.55 GHz or higher than 24.05 GHz but no more than 24.25 GHz, radio stations of a low-power security system and radio stations which perform road traffic information communication shall be a value whose mean power is 2.5 micro W or lower; provided, however, that notwithstanding the values prescribed in 2 and 18, the permissible value of the intensity of spurious emissions or unwanted emissions of those separately notified by the Minister of Internal Affairs and Communications among specified low-power radio stations shall be the value defined in the notifications.

23 Notwithstanding the values prescribed in 2, the permissible value of the unwanted emission intensity of the transmitting equipment of specified low-power radio stations using emissions of a frequency of 312 MHz or higher but no more than 315.25 MHz, or a frequency of 433.67 MHz or higher but no more than 434.17 MHz shall be as follows:

- (1) The radio stations using emissions of a frequency of 312 MHz or higher but no more than 315.25 MHz;

Frequency band	Permissible value of unwanted emission intensity
Lower than 1 GHz (except higher than 312 MHz to 315.25 MHz)	No greater than 250 nW in any 100 kHz bandwidth
Higher than 1 GHz	No greater than 1 micro Watts in any 1 MHz bandwidth

Note: Permissible value of unwanted emission intensity shall be a value of E.I.R.P.

- (2) The radio stations using emissions of a frequency of 433.67 MHz or higher but no more than 434.17 MHz;

Frequency band	Permissible value of unwanted emission intensity
Lower than 1 GHz (except higher than 433.67 MHz to 434.17 MHz)	No greater than 250 nW in any 100 kHz bandwidth
Higher than 1 GHz	No greater than 1 micro Watts in any 1 MHz bandwidth

Note: Permissible value of unwanted emission intensity shall be a value of E.I.R.P.

- 24 Notwithstanding the values prescribed in 2, the permissible value of the unwanted emission intensity of the transmitting equipment of premises radio stations using emissions of a frequency of 952 MHz or higher but no more than 954 MHz, and the transmitting equipment of specified low-power radio stations using emissions of a frequency of 952 MHz or higher but no more than 955 MHz shall be as follows:

- (1) The premises radio stations using emissions of a frequency of 952 MHz or higher but no more than 954 MHz;

Frequency band	Permissible value of unwanted emission intensity
Lower than 1,000 MHz (except higher than 715 MHz to 960 MHz)	A mean value of the power no greater than -36 dB in any 100 kHz bandwidth (with 1 mW regarded as 0 dB. The same applies hereafter).
Higher than 715 MHz to 945 MHz	A mean value of the power no greater than -61 dB in any 1 MHz bandwidth
Higher than 945 MHz to 950 MHz	A mean value of the power no greater than -61 dB in any 100 kHz bandwidth
Higher than 950 MHz to 952 MHz	A mean value of the power no greater than -39 dB in any 100 kHz bandwidth
Higher than 952 MHz to 954 MHz (except a shift frequency of 200 kHz + 100(n-1) from center frequency of radio channels) (note)	A mean value of the power no greater than -29 dB in any 100 kHz bandwidth
Higher than 954 MHz to 956 MHz	A mean value of the power no greater than -39 dB in any 100 kHz bandwidth
Higher than 956 MHz to 960 MHz	A mean value of the power no greater than -61

	dB in any 100 kHz bandwidth
Higher than 1,000 MHz (except higher than 1,884.5 MHz to 1,919.6 MHz )	A mean value of the power no greater than -30 dB in any 1 MHz bandwidth
Higher than 1,884.5 MHz to 1,919.6 MHz	A mean value of the power no greater than -61 dB in any 1 MHz bandwidth

Note: n represents the number of unit radio channels that are used simultaneously as one radio channel.

(2) The specified low-power radio stations using emissions of a frequency of 952 MHz or higher but no more than 955 MHz;

Frequency band	Permissible value of unwanted emission intensity
Lower than 1,000 MHz (except higher than 715 MHz to 960 MHz)	A mean value of the power no greater than -36 dB in any 100 kHz bandwidth (with 1 mW regarded as 0 dB. The same applies hereafter).
Higher than 715 MHz to 945 MHz	A mean value of the power no greater than -61 dB in any 1 MHz bandwidth
Higher than 945 MHz to 950 MHz	A mean value of the power no greater than -61 dB in any 100 kHz bandwidth
Higher than 950 MHz to 956 MHz (except a shift frequency of 200 kHz from center frequency of radio channels)	A mean value of the power no greater than -39 dB in any 100 kHz bandwidth
Higher than 956 MHz to 960 MHz	A mean value of the power no greater than -61 dB in any 100 kHz bandwidth
Higher than 1,000 MHz (except higher than 1,884.5 MHz to 1,919.6 MHz )	A mean value of the power no greater than -30 dB in any 1 MHz bandwidth
Higher than 1,884.5 MHz to 1,919.6 MHz	A mean value of the power no greater than -61 dB in any 1 MHz bandwidth

25 Notwithstanding the values prescribed in 2 and 18, the permissible value of the unwanted emission intensity of the transmitting equipment of specified low-power radio stations which use emissions of a frequency of 2,400 MHz or higher but no more than 2,483.5 MHz and which use the frequency hopping method, and the transmission equipment at radio stations of low-power data communication systems that use emissions of a frequency of 2,400 MHz or

higher but no more than 2,483.5 MHz shall be as follows:

Frequency band	Permissible value of unwanted emission intensity
Lower than 2,387 MHz and higher than 2,496.5 MHz	The mean power in any 1 MHz bandwidth is 2.5 $\mu$ W or lower.
2,387 MHz or higher but lower than 2,400 MHz and higher than 2,483.5 MHz but no more than 2,496.5 MHz	The mean power in any 1 MHz bandwidth is 25 $\mu$ W or lower.

26 Notwithstanding the values prescribed in 2 and 18, the permissible value of the unwanted emission intensity of the transmitting equipment of premises radio stations that use emissions of a frequency higher than 2,425 MHz but no more than 2,475 MHz and which employ the frequency hopping method shall be as follows:

Frequency band	Permissible value of unwanted emission intensity
Lower than 2,425 MHz and higher than 2,475 MHz	The mean power in any 1 MHz bandwidth is 2.5 $\mu$ W or lower.

27 Notwithstanding the values prescribed in 2 and 18, the permissible value of the unwanted emission intensity of the transmitting equipment at radio stations of the low-power data communication system which uses emissions of a frequency of 2,471 MHz or higher but no more than 2,497 MHz shall be as follows:

Frequency band	Permissible value of unwanted emission intensity
Lower than 2,458 MHz and higher than 2,510 MHz	The mean power in any 1 MHz bandwidth is 2.5 $\mu$ W or lower.
2,458 MHz or higher but lower than 2,471 MHz and 2,497 MHz or higher but lower than 2,510 MHz	The mean power in any 1 MHz bandwidth is 25 $\mu$ W or lower.

28 Notwithstanding the values prescribed in 2, the permissible value of the unwanted emission intensity of the transmitting equipment at radio stations of the low-power data communication system which use emissions of a frequency of 5,180 MHz, 5,190 MHz, 5,200 MHz, 5,220 MHz, 5,230 MHz, 5,240 MHz, 5,260 MHz, 5,270 MHz, 5,280 MHz, 5,300 MHz, 5,310 MHz,

5,320 MHz, 5,500 MHz, 5,510 MHz, 5,520 MHz, 5,540 MHz, 5,550 MHz, 5,560 MHz, 5,580 MHz, 5,590 MHz, 5,600 MHz, 5,620 MHz, 5,630 MHz, 5,640 MHz, 5,660 MHz, 5,670 MHz, 5,680 MHz, or 5,700 MHz shall be as follows:

(1) The permissible value of the unwanted emission intensity which use emissions of a frequency of 5,180 MHz, 5,200 MHz, 5,220 MHz, 5,240 MHz, 5,260 MHz, 5,280 MHz, 5,300 MHz or 5,320 MHz shall be as follows:

a. the transmission equipment which has occupied bandwidth of 18 MHz or less;

Frequency band	Permissible value of unwanted emission intensity
Lower than 5,140 MHz and higher than 5,360 MHz	The mean power in any 1 MHz bandwidth is 2.5 $\mu$ W or lower.

b. the transmission equipment which has occupied bandwidth of more than 18 MHz to 19 MHz;

Frequency band	Permissible value of unwanted emission intensity
Lower than 5,135 MHz and higher than 5,365 MHz	The mean power in any 1 MHz bandwidth is 2.5 $\mu$ W or lower.

(2) The permissible value of the unwanted emission intensity which use emissions of a frequency of 5,190 MHz, 5,230 MHz, 5,270 MHz, or 5,310 MHz shall be as follows:

Frequency band	Permissible value of unwanted emission intensity
Lower than 5,100 MHz and higher than 5,400 MHz	The mean power in any 1 MHz bandwidth is 2.5 $\mu$ W or lower.

(3) The permissible value of the unwanted emission intensity which use emissions of a frequency of 5,500 MHz, 5,520 MHz, 5,540 MHz, 5,560 MHz, 5,580 MHz, 5,600 MHz, 5,620 MHz, 5,640 MHz, 5,660 MHz, 5,680 MHz, or 5,700 MHz shall be as follows:

a. the case of the modulation type which is except OFDM method;

Frequency band	Permissible value of unwanted emission intensity
Lower than 5,460 MHz and higher than 5,740 MHz	The mean power in any 1 MHz bandwidth is 2.5 $\mu$ W or lower.

b. the case of the modulation type which is OFDM method;

Frequency band	Permissible value of unwanted emission intensity
Lower than 5,455 MHz and higher than 5,745 MHz	The mean power in any 1 MHz bandwidth is 2.5 $\mu$ W or lower.

(4) The permissible value of the unwanted emission intensity which use emissions of a frequency of 5,510 MHz, 5,550 MHz, 5,590 MHz, 5,630 MHz, or 5,670 MHz shall be as follows:

Frequency band	Permissible value of unwanted emission intensity
Lower than 5,420 MHz and higher than 5,760 MHz	The mean power in any 1 MHz bandwidth is 2.5 $\mu$ W or lower.

29 Notwithstanding the values prescribed in 2, the permissible value of the unwanted emission intensity of transmitting equipment at radio stations of low-power data communication systems that use emissions of a frequency of 24.77 GHz or higher but no more than 25.23 GHz and which are emissions of a frequency of 24.77 GHz or 24.77 GHz plus an integral multiple of 10 MHz, or which use emissions of a frequency of 27.02 GHz or higher but no more than 27.46 GHz and which are the emissions of a frequency of 27.02 GHz or 27.02 GHz plus an integral multiple of 10 MHz shall be as follows:

Frequency band	Permissible value of unwanted emission intensity
Lower than 24.705 GHz, higher than 25.295 GHz but lower than 26.955 GHz and higher than 27.525 GHz	The mean power in any 1 MHz bandwidth is 1 $\mu$ W or lower.

30 Notwithstanding the values prescribed in 2 (1) and (3), the permissible value of the intensity of spurious emissions or unwanted emissions of the transmitting equipment of land mobile stations of the narrow-band communication system, base stations of the narrow-band communication system, and radio stations which perform communication for testing the radio equipment of land mobile stations of the narrow-band communication system shall be as follows:

(1) Permissible value of the spurious emission intensity in the out-of-band domain

25  $\mu$ W or lower

(2) Permissible value of the unwanted emission intensity in the spurious domain

a. The transmitting equipment of land mobile stations and radio stations which performs communication for testing the radio equipment of land mobile stations

2.5  $\mu$ W or lower

b. Transmitting equipment at base stations

25  $\mu$ W or lower

(3) Frequency at the boundary of the out-of-band domain and spurious domain

Carrier +/- 12.2 MHz

31 Notwithstanding the values prescribed in 2 (1) and (2), the permissible value of the unwanted emission intensity of the transmitting equipment at radio stations (limited only to fixed stations, base stations, land mobile relay stations and land mobile stations) which uses emissions of a frequency higher than 17.7 GHz but no more than 18.72 GHz and higher than 19.22 GHz but no more than 19.7 GHz shall be a value whose mean power is 50  $\mu$ W or lower in any 1 MHz bandwidth; provided, however, that the permissible value of the unwanted emission intensity in the out-of-band domain shall be the value separately notified by the Minister of Internal Affairs and Communications.

32 Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmission equipment at radio stations in the land mobile service using emissions of a frequency in the 22 GHz-band, 26 GHz-band or 38 GHz-band and at radio stations the mean power of whose basic frequency is 1 W or lower and which use emissions of a frequency higher than 54.25 GHz but no more than 59 GHz shall be a value of 50  $\mu$ W or lower.

33 Notwithstanding the values prescribed in 2, the permissible value of the unwanted emission intensity of the transmitting equipment of base stations of the 5 GHz-band radio access system, land mobile relay stations and land mobile stations shall be the value separately notified by the Minister of Internal Affairs and Communications.

34 Notwithstanding the values prescribed in 2, the permissible value of the intensity of spurious emissions or unwanted emissions of the transmitting equipment listed below among the

transmitting equipment of aircraft earth stations shall be as follows:

- (1) The permissible value of the intensity of single-modulated unwanted emissions of the transmitting equipment among those at aircraft earth stations and which uses emissions of a frequency higher than 1,626.5 MHz but no more than 1,660.5 MHz (excluding those capable of high-speed radio data communication) shall be as follows; provided, however, that this shall not apply to those in the range of +/- 35 kHz of the frequency of the carrier.

Frequency band	Permissible value of the unwanted emission intensity
1,525 MHz or lower	A value 135 dB lower than the equivalent isotropic radiated power of the basic frequency in any 4 kHz width
Higher than 1,525 MHz but no more than 1,559 MHz	A value 203 dB lower than the equivalent isotropic radiated power of the basic frequency in any 4 kHz width
Higher than 1,559 MHz but no more than 1,565 MHz	A value 135 dB lower than the equivalent isotropic radiated power of the basic frequency in any 4 kHz width
Higher than 1,565 MHz but no more than 1,585 MHz	A value 155 dB lower than the equivalent isotropic radiated power of the basic frequency in any 1 MHz width
Higher than 1,585 MHz but no more than 1,598 MHz	A value 105 dB lower than the equivalent isotropic radiated power of the basic frequency in any 4 kHz width
Higher than 1,598 MHz but no more than 1,605 MHz	A value 105 dB lower than the equivalent isotropic radiated power of the basic frequency in any 1 MHz width
Higher than 1,605 MHz but no more than 1,610 MHz	A value 85 dB lower than the equivalent isotropic radiated power of the basic frequency in any 1 MHz width
Higher than 1,610 MHz but no more than 1,735 MHz	A value 55 dB lower than the equivalent isotropic radiated power of the basic frequency in any 4 kHz width
Higher than 1,735 MHz but no more than 12 GHz	A value 105 dB lower than the equivalent isotropic radiated power of the basic frequency in any 4 kHz width
Higher than 12 GHz but no more than 18 GHz	A value 70 dB lower than the equivalent isotropic radiated power of the basic frequency in any 4 kHz width

- (2) The permissible value of the spurious emission intensity of the transmitting equipment among those at aircraft earth stations and which use emissions of a frequency higher than 1,626.5 MHz but no more than 1,660.5 MHz (limited only to those capable of high-speed radio data communication) shall be as follows:
- a. The permissible value of the equivalent isotropic radiated power intensity of modulated spurious emissions (excluding harmonic emissions) shall be a value of the curve given in

Figure 1 in any 4 kHz width; provided, however, that the permissible value of the spurious emission intensity for each modulated frequency in the frequency band from 1,626.4 kHz to 1,660.6 kHz shall be a value 60 dB lower than the equivalent isotropic radiated power of the non-modulated basic frequency for those whose detuned frequency is higher than 100 kHz.

- b. The permissible value of the intensity of harmonics emissions (limited only to those of a frequency of 18 GHz or lower) shall be the value whose equivalent isotropic radiated power is -23 dB or lower.

35 Notwithstanding the values prescribed in 2, the permissible value of the spurious emission intensity of the transmission equipment of INMARSAT portable mobile earth stations shall be as follows:

- (1) Transmission equipment of the INMARSAT C-type of INMARSAT portable mobile earth stations The values prescribed in 14 (1) shall apply.
- (2) Transmission equipment of the INMARSAT B-type of INMARSAT portable mobile earth stations
  - a. The permissible value of the equivalent isotropic radiated power intensity of modulated spurious emissions (excluding harmonics emissions) shall be a value of the curve given in Figure 1 in any 4 kHz width; provided, however, that the permissible value of the spurious emission intensity for each modulated frequency in the frequency band from 1,626.4 MHz to 1,646.6 MHz shall be a value 60 dB lower than the equivalent isotropic radiated power of the non-modulated basic frequency for those whose detuned frequency is higher than 100 kHz (500 kHz when performing communication based on high-speed radio data communication).
  - b. The permissible value of the harmonics emission intensity (limited only to those of the frequency of 18 GHz or lower) shall be the value prescribed in 14 (3) b.
- (3) Transmission equipment of the INMARSAT M-type of INMARSAT portable mobile earth stations
  - a. The permissible value of the equivalent isotropic radiated power intensity of modulated spurious emissions (excluding harmonics emissions) shall be a value of the curve given in Figure 1 in any 4 kHz width; provided, however, that the permissible value of the spurious emission intensity for each modulated frequency in the frequency band from 1,626.4 MHz to 1,660.6 MHz shall be a value 60 dB lower than the equivalent isotropic radiated power of the non-modulated basic frequency for those whose detuned frequency is higher than

100 kHz.

b. The permissible value of the harmonics emission intensity (limited only to those of a frequency of 18 GHz or lower) shall be a value prescribed in 14 (4) b.

(4) Transmission equipment of the INMARSAT mini M-type of INMARSAT portable mobile earth stations and the transmission equipment of the INMARSAT F-type of INMARSAT portable mobile earth stations The values prescribed in 14 (5) shall apply.

(5) Transmission equipment of the INMARSAT D-type of INMARSAT portable mobile earth stations The permissible value of the equivalent isotropic radiated power intensity of modulated spurious emissions (excluding harmonics emissions) shall be the value of the curve given in Figure 1.

(6) Transmission equipment of the INMARSAT BGAN-type of INMARSAT portable mobile earth stations The permissible value of the equivalent isotropic radiated power intensity of modulated spurious emissions shall be a value 60 dB lower than the equivalent isotropic radiated power of the non-modulated basic frequency.

36 The provisions for the permissible value of the spurious emission intensity in the out-of-band domain of the transmitting equipment at meteorological aids stations and convenience radio stations the mean power of whose basic frequency is 1 W or lower (limited only to those using emissions in the 27 MHz-band) shall not apply.

37 Notwithstanding the values prescribed in 2 (1) and 3, the permissible value of the intensity of unwanted emissions in the out-of-band domain of the transmission equipment at radio stations using H3E emissions, J3E emissions or R3E emissions of 28 MHz or lower (excluding the transmitting equipment at radio stations in aeronautical mobile service, broadcasting stations, fixed stations relaying broadcasting and amateur stations ) shall be as follows:

Frequency interval from the assigned frequency	Permissible value of the intensity of unwanted emissions in the out-of-band domain
Higher than 1.5 kHz but no more than 4.5 kHz	A value 31 dB lower than the peak envelope power of the basic frequency
Higher than 4.5 kHz but no more than 7.5 kHz	A value 38 dB lower than the peak envelope power of the basic frequency
Higher than 7.5 kHz	A value 50 mW or lower and which is 43 dB lower than the peak envelope power of the basic frequency

38 Notwithstanding the values prescribed in 2 (1) and 2 (3), the permissible value of the spurious emission intensity in the out-of-band domain, the permissible value of the unwanted emission intensity in the spurious domain and the frequency at the boundary of the out-of-band domain and the spurious domain of the transmission equipment at fixed stations that perform 1,900 MHz-band subscriber radio access communication or radio stations that perform communication, etc. for testing 1,900 MHz-band subscriber radio access communication equipment shall be as follows:

(1) The permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain

Frequency band	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Frequencies higher than 1,893.5 MHz but no more than 1,919.6 MHz	250 nW or lower	250 nW or lower
Frequencies of 1,893.5 MHz or lower and higher than 1,919.6 MHz	2.5 $\mu$ W or lower	2.5 $\mu$ W or lower

Note The permissible value of the intensity of spurious emissions or unwanted emissions shall be the value of the mean power for the duration of the spurious emission or unwanted emission for each frequency supplied to the feeder.

(2) Frequency at the boundary of the out-of-band domain and spurious domain  
Carrier +/- 996 kHz

39 Notwithstanding the values prescribed in 2 (1) and 36, the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment using the single-sideband (excluding those based on the real number zero-point single-sideband modulation method) among mobile stations (excluding aircraft stations) shall be a value 43 dB lower than the peak envelope power of the basic frequency.

40 Notwithstanding the values prescribed in 2 (1), the permissible value of the spurious emission intensity in the out-of-band domain and the permissible value of the unwanted emission intensity in the spurious domain of the transmitting equipment at amateur stations (including

amateur stations that remote-control the radio equipment of amateur stations established on a satellite) using emissions of a frequency of 30 MHz or lower shall be as follows:

Antenna power	Permissible value of the spurious emission intensity in the out-of-band domain	Permissible value of the unwanted emission intensity in the spurious domain
Higher than 5 W	A value 50 mW or lower and 40 dB lower than the mean power of the basic frequency	A value 50 mW or lower and which is 50 dB lower than the peak envelope power of the basic frequency
Higher than 1 W but no more than 5 W		50 $\mu$ W or lower
1 W or lower	100 $\mu$ W or lower	

41 Notwithstanding the values prescribed in 2 (1) and (2), the permissible value of the intensity of the spurious emissions or unwanted emissions of the transmitting equipment at radio stations which performs space radio communication (excluding those to which the provisions of 14, 34, 35, and 40 apply) and which is separately notified by the Minister of Internal Affairs and Communications shall be the value defined in the notification.

42 Notwithstanding the values prescribed in 2, the permissible value of the unwanted emission intensity of the transmitting equipment at radio stations of the Ultra Wide-band Wireless system shall be as follows:

Frequency band	Permissible value of unwanted emission intensity (with 1 mW regarded as 0 dB)	
	The mean power in any 1 MHz bandwidth	The peak power in any 1 MHz bandwidth
Lower than 1,600 MHz	A value of -90 dB or less	A value of -84 dB or less
1,600 MHz to less than 2,700 MHz	A value of -85 dB or less	A value of -79 dB or less
2,700 MHz to less than 10.6 GHz	A value of -70 dB or less	A value of -64 dB or less
10.6 GHz to less than 10.7 GHz	A value of -85 dB or less	A value of -79 dB or less
10.7 GHz to less than 11.7 GHz	A value of -70 dB or less	A value of -64 dB or less
11.7 GHz to less than 12.75 GHz	A value of -85 dB or less	A value of -79 dB or less
12.75 GHz and more	A value of -70 dB or less	A value of -64 dB or less

- 43 Notwithstanding the values prescribed in 2, the permissible value of the unwanted emission intensity of the transmitting equipment at radio stations of the fixed stations for Telecommunication Business using emission of a frequency in the 1,500MHz band shall be the value separately notified by the Minister of Internal Affairs and Communications.
- 44 Notwithstanding the values prescribed in 2, the permissible value of the unwanted emission intensity of the transmitting equipment at radio stations of the orthogonal frequency division multiple access broad band wireless access system or radio stations performing communications, etc., for testing for orthogonal frequency division multiple access broad band wireless access system shall be the value separately notified by the Minister of Internal Affairs and Communications.
- 45 Notwithstanding the values prescribed in 2, the permissible value of the unwanted emission intensity of the transmitting equipment at radio stations of the time division/orthogonal frequency division multiple access broad band wireless access system or radio stations performing communications, etc., for testing for time division/orthogonal frequency division multiple access broad band wireless access system shall be the value separately notified by the Minister of Internal Affairs and Communications.
- 46 Notwithstanding the values prescribed in 2, the permissible value of the unwanted emission intensity of the transmitting equipment at radio stations of the time division/frequency division multiple access broad band wireless access system or radio stations performing communications, etc., for testing for time division/frequency division multiple access broad band wireless access system shall be the value separately notified by the Minister of Internal Affairs and Communications.
- 47 Notwithstanding the values prescribed in 1 through 46, the Minister of Internal Affairs and Communications can separately define the values if deemed necessary.

