TECHNICAL CONDITIONS FOR THE EQUIPMENT THAT DOES NOT NEED TO BE CONTAINED IN A CABINET OF THE RADIO EQUIPMENT OF SPECIFIED LOW-POWER RADIO STATIONS, THE TRANSMISSION-TIME RESTRICTING DEVICE, AND THE CARRIER SENSING DEVICE

(Article 49.14 of the Ordinance Regulating Radio Equipment)

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Finally amended in No. 355 on May 28, 2001

The technical conditions for the equipment that does not need to be contained in a cabinet of the radio equipment of specified low-power radio stations, the transmission-time restricting device, and the carrier sensing device, the technical conditions for the radio equipment that does not need to be equipped with the transmission-time restricting device and the carrier sensing device, and the technical conditions for the transmitting device to which Article 49.14 item 6 of the Ordinance Regulating Radio Equipment does not apply shall be stipulated as follows based on the provisions of Article 49.14 of the Ordinance Regulating Radio Equipment (Radio Regulatory Commission Regulations No. 18 of 1950).

1 The equipment that does not need to be contained in a cabinet of radio equipment shall be as follows.

(1) Indicators which indicate the operation state of a transmitting device and a receiving device

(2) Volume adjusting devices and squelch adjusting devices

(3) Telephone transmitters and telephone receivers

(4) Frequency switching devices

(5) Transmission and receiving switching devices

(6) Telemeter signals, telecontrol signals, data signals, accessory equipment for radio paging, and their equivalents

(7) The antenna of the radio equipment for medical telemeters which is shared with the lead wire which connects a detector mounted in a living body

(8) The antenna of the radio equipment for hearing-aid radio microphones which is shared with the lead wire which connects microphones or earphones

(9) The antenna of the radio equipment for radio telephony which uses emissions of a frequency in a range of higher than 413.7 MHz to 414.1437 MHz and higher than 454.05 MHz to 454.1937 MHz

(10) The antenna of the radio equipment for sound-assistance radio telephony

2 The transmission-time restricting device shall stop emission radiation within a transmission time defined in the middle column of the table below after the emissions are radiated in accordance with the classifications of the applications listed in the left-hand column of the table, and shall transmit the subsequent emissions only after the transmission quiescence time stated in the right-hand column of the table has passed.

Applications		Transmission time		Transmission Quiescence Time	
Radio telephony		30 seconds	Note 1	2 seconds	
For telemeters, telecontrols, and data transmission		40 seconds	Notes 2 and 3	2 seconds	Note 3
For radio paging	Analog method	15 seconds	Notes 4 and 5	1 second	
	Digital method	5 seconds	Note 4	1 second	
For sound-assistance radio telephony		30 seconds		1 second	

Notes: 1 Notwithstanding the value shown in the table, the transmission time when the frequency control channel is used shall be 0.5 second.

2 Notwithstanding the value shown in the table, the transmission time when the frequency control channel is used shall be 0.2 second.

3 Notwithstanding the value shown in the table, the transmission time of the telecontrol (including the data transmission annexed thereto) which uses emissions of a frequency in a range of higher than 426.025 MHz to 426.1375 MHz shall be 5 seconds. However, after stopping the emission radiation, the transmission-time restricting device shall be capable of re-transmitting the emissions without having any transmission quiescence time only within 5 continuous seconds of the emission radiation.

4 Notwithstanding the value shown in the table, the transmission time of the responding signal for calling shall be 0.4 second.

5 Notwithstanding the value shown in the table, the transmission time when emissions of a frequency of 429.775 MHz, 429.7875 MHz and 429.8 MHz are used shall be 5 seconds.

3 When receiving higher emissions than those shown in the items below from another radio station, the carrier sensing device shall not radiate emissions of the same frequency (if the communication method of the carrier sensing device is duplex operation or semi-duplex operation, the transmission frequency corresponding to the receiving frequency) as that which the said radio station radiates. However, the carrier sensing device whose application is radio telephony (limited to the radio telephony whose antenna power is 1 mW or lower) shall be capable of conducting carrier sensing with the transmission frequency of the radio station where the said carrier sensing device is equipped even if the communication method is duplex operation or semi-duplex operation.

(1) For the radio equipment for telemeters, telecontrols, data transmission (limited to the radio equipment which uses emissions of a frequency in the 400 MHz band), radio telephony, and radio paging, the voltage induced in the antenna whose absolute gain is 2.14 dB shall be 7 μV.

(2) For the radio equipment for data transmission (limited to that which uses emissions of a frequency in the 1,200 MHz band), the voltage induced in the antenna whose absolute gain is 2.14 dB shall be 4.47 μV.

(3) For the radio equipment for sound-assistance radio telephony, the voltage induced in the antenna whose absolute gain is -10 dB shall be 200 μV.

4 The radio equipment which does not need to be equipped with a transmission time restricting device shall be as follows.

(1) Radio equipment for telemeters, telecontrols, and data transmission which uses emissions of a

frequency in a range of higher than 429.25 MHz to 429.7375 MHz, higher than 1,216.0375 MHz to 1,216.5 MHz, and higher than 1,252.0375 MHz to 1,252.5 MHz

(2) Radio equipment for medical telemeters

(3) Radio equipment for radio microphones

(4) Radio equipment for hearing-aid radio microphones

(5) Radio equipment for radio telephony which automatically restricts speech time to within 3 minutes and does not perform subsequent communication if 2 seconds have not passed after the first communication finished

(6) Radio equipment for radio telephony whose antenna power is 1 mW or more and which uses emissions of a frequency in a range of higher than 413.7 MHz to 414.1437 MHz, higher than 421.575 MHz to 421.8 MHz, higher than 440.025 MHz to 440.25 MHz, and higher than 454.05 MHz to 454.1937 MHz

5 The radio equipment that does not need to be equipped with a carrier sensing device shall be as follows.

(1) Radio equipment for telemeters, telecontrols, and data transmission which uses emissions of a frequency in a range of higher than 426.025 MHz to 426.1375 MHz

(2) Radio equipment for medical telemeters

(3) Radio equipment for radio microphones

(4) Radio equipment for hearing-aid radio microphones

(5) Radio equipment for radio telephony whose antenna power is 1 mW or more and which uses emissions of a frequency in a range of higher than 413.7 MHz to 414.1437 MHz, and higher than 454.05 MHz to 454.1937 MHz

6 The technical conditions for the transmitting device to which Article 49.14 item 1 f of the Ordinance Regulating Radio Equipment does not apply shall be as follows.

(1) For the transmitting device for radio microphones which uses emissions of a frequency in the 70 MHz band, the power radiated into the ±30 kHz band of the frequency 120 kHz distant from the carrier frequency shall be lower than the carrier power by 60 dB or more.

(2) For the radio equipment for hearing-aid radio microphones, the adjacent channel leakage power in accordance with the occupied bandwidth of emissions to be transmitted shall be as shown in the table below.

Occupied Bandwidth of Emissions to be Transmitted	Adjacent Channel Leakage Power
20 kHz or lower	The power radiated into the ±10 kHz band of the frequency 25 kHz distant from the carrier frequency shall be lower than the carrier frequency by 60 dB or more.
Higher than 20 kHz to 30 kHz	The power radiated into the ±15 kHz band of the frequency 50 kHz distant from the carrier frequency shall be lower than the carrier frequency by 60 dB or more.
Higher than 30 kHz to 80 kHz	The power radiated into the ±40 kHz band of the frequency 125 kHz distant from the carrier frequency shall be lower than the carrier frequency by 60 dB or more.

(3) For the transmitting device for sound-assistance radio telephony, the power radiated into the ±50 kHz band of the frequency 200 kHz distant from the carrier frequency shall be lower than the carrier power by 60 dB or more.

(4) For the transmitting device for radio microphones which uses emissions of a frequency in the 300 MHz band, the power radiated into the ±15 kHz band of the frequency 50 kHz distant from the carrier frequency shall be lower than the carrier power by 60 dB or more.

(5) For the transmitting device for medical telemeters (except the transmitting device for medical telemeters whose occupied bandwidth of emissions to be transmitted is 8.5 kHz or lower), the adjacent channel leakage power in accordance with the occupied bandwidth of emissions to be transmitted shall be as shown in the table below.

Higher than 16 kHz to 32 kHz	The power radiated into the ±16 kHz band of the frequency 50 kHz distant from the carrier frequency shall be lower than the carrier frequency by 40 dB or more.
Higher than 32 kHz to 64 kHz	The power radiated into the ±32 kHz band of the frequency 100 kHz distant from the carrier frequency shall be lower than the carrier frequency by 40 dB or more.
Higher than 64 kHz to 320 kHz	The power radiated into the ±160 kHz band of the frequency 500 kHz distant from the carrier frequency shall be lower than the carrier frequency by 40 dB or more.

Note: For the transmitting device of a digital system, the adjacent channel leakage power shall be the value obtained when the frequency is modulated by a standard encoding test signal with the same transmission rate as that of a modulation signal.

(6) For the transmitting device for telemeters, telecontrols, and data transmission which uses emissions of a frequency in the 400 MHz band (except the radio equipment whose occupied bandwidth of emissions to be transmitted is 8.5 kHz or lower), the power radiated into the ±8 kHz band of the frequency 25 kHz distant from the carrier frequency shall be lower than the carrier frequency by 40 dB or more.

(7) For the transmitting device for radio microphones which uses emissions of a frequency in the 800 MHz band, the power radiated into the ±55 kHz band of the frequency 250 MHz distant from the carrier frequency shall be lower than the carrier frequency by 60 dB or more.

(8) The technical conditions for the transmitting device for telemeters, telecontrols, and data transmission which uses emissions of a frequency in the 1,200 MHz band shall be as follows.

a Radio equipment whose channel interval is 25 kHz

When the frequency is modulated by a standard encoding test signal with the same transmission rate as that of a modulation signal, the power radiated into the ±8 kHz band of the frequency 25 kHz distant from the carrier frequency shall be lower than the carrier frequency by 40 dB or more.

b Radio equipment whose channel interval is 50 kHz

When the frequency is modulated by a standard encoding test signal with the same transmission rate as that of a modulation signal, the power radiated into the ±16 kHz band of the frequency 50 kHz distant from the carrier frequency shall be lower than the carrier frequency by 40 dB or more.

Supplementary Provisions (December 5, 1996
Ministry of Posts and Telecommunications Announcement No. 628)

The radio equipment of a specified low-power radio station (for data transmission) for which technical standards conformity certification was obtained before the enforcement of this Announcement as the radio equipment which complies with the conditions defined in the Announcement before amendment shall remain in force even after the enforcement date of this Announcement.