

TECHNICAL CONDITIONS FOR RADIO EQUIPMENT AT RADIO STATIONS OF A LOW-POWER DATA COMMUNICATION SYSTEM

(Article 49.20 item 4) o of the Ordinance Regulating Radio Equipment)

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The technical conditions for the radio equipment at radio stations of a low-power data communication system that uses emissions of a frequency prescribed in Article 6 paragraph 4 item 4 (4) of the Radio Law Enforcement Regulations (Radio Regulatory Commission Regulations No. 14) shall be stipulated pursuant to the provisions of Article 49.20 item 4) o of the Ordinance Regulating Radio Equipment (Radio Regulatory Commission Regulations No. 18 of 1950), as follows.

- 1 When the carrier sensing device receives emissions radiated from the radio equipment at a radio station other than a radio station on the other end of communication, and the strength of the electric field in the maximum gain direction of the antenna received exceeds 460 mV/m (when the equivalent isotropically radiated power within a bandwidth of 1 MHz exceeds the value obtained by applying the antenna power of 10 mW in terms of the mean power within a bandwidth of 1 MHz to the transmitting antenna with its absolute gain being 0 dB, the value determined by the expression specified below), the carrier sensing device shall not radiate emissions of the same frequency as that of the unit radio channel that the said radio equipment radiates. In this case, the emissions radiated from the said radio equipment shall be received in the frequency of the carrier of each unit radio channel.

$460/A$ mV

A represents the value determined by dividing the equivalent isotropically radiated power within a bandwidth of 1 MHz by the value obtained by applying the antenna power of 10 mW in terms of the mean power within a bandwidth of 1 MHz to the transmitting antenna with its absolute gain being 0 dB.

- 2 The radio equipment shall start transmission after having conducted carrier sensing. However, when transmission and reception are controlled by other radio equipment, and when the radio equipment that has carried out transmission re-starts transmission within 4 ms of having conducted carrier sensing, the carrier sensing can be omitted.
- 3 **The radio equipment that can control the transmission and reception of other radio stations shall have a function for receiving emissions radiated from the radio equipment at a**

radio station other than the radio station on the other end of communication in the frequency that it can radiate, and for selecting the unit radio channel with the electric field whose strength is the lowest. In this case, the emissions radiated from the said radio equipment shall be received in the frequency of the carrier wave of each unit radio channel.