

The Outline of Proposed Amendment to Ministerial Ordinance

1 Item
Partial amendment of Regulations for Radio Equipment

2 Amendment to ministerial ordinance
Regulations for Radio Equipment

3 Reasons for amendment

Private PHS (Personal Handyphone System), which use 1.9GHz-band, is institutionalized as “private Digital Codeless Phone system” in 1993. After that, DECT (Digital Enhanced Codeless Telecommunications) system and sPHS (super PHS) are also installed in 2010 for the demand of improvement of functions such as high-quality voice and data communication.

This is to amend those “private Digital Codeless Phone system” for the introduction of sXGP (shared eXtended Global Platform) system which is adapted to international standards for cellular phone such as TD-LTE (Log Term Evolution) system, in order to respond to various usage in the IoT (Internet of Things) environment.

4 Outline of the amendment

Technical requirements of radio equipment (Red underlined character is amended)

Item		
System	Private Digital Codeless Phone system	
	<u>sXGP system</u>	DECT system (red characters are amended)
(1)Frequency band	<u>1.9GHz-band</u>	1.9GHz-band
(2)Carrier frequency	<u>1.4MHz-system :</u> <u>1897.4MHz,1899.2MHz,1901.0MHz</u> <u>5MHz-system :</u> <u>1899.1MHz</u>	1,895.616MHz, 1,897.344MHz, 1,899.072MHz, 1900.800MHz, 1902.528MHz, <u>1904.256MHz</u>
(3)Transmission method	<u>Combination of TDMA or SC-FDMA</u> <u>and TDD</u>	Combination of TDMA and TDD

(4) Modulation method	<u>For base units:</u> <u>BPSK, QPSK, 16QAM, 64QAM or 256QAM</u> <u>For codeless units :</u> <u>BPSK, QPSK, 16QAM or 64QAM</u>	GFSK, $\pi/2$ -DBPSK, $\pi/4$ -DQPSK, $\pi/8$ -D8PSK, 16QAM or 64QAM
(5) Allowable deviation of frequency	<u>0.25×10^{-6}</u>	10×10^{-6}
(6) Occupied bandwidth	<u>1.4MHz-system :</u> <u>1.4MHz</u> <u>5MHz-system:</u> <u>5MHz</u>	1.728MHz
(7) Antenna power	<u>1.4MHz-system :</u> <u>less than 100mW</u> <u>5MHz-system :</u> <u>For base units : less than 200mW</u> <u>For codeless units : less than 100mW</u>	<u>Less than 240mW</u>
(8) Antenna gain	<u>Less than 4dBi</u>	less than 4dBi
(9) Transmission rate	=	1.152Mbps (if using GFSK)
(10) Frame Length	<u>10msec</u>	10msec
(11) Spurious	<u>Less than -36dBm/MHz</u>	Less than -36dBm/MHz

<p>(12)Carrier sense (1) (For the protection of speech channel)</p>	<p><u>By using the following carrier sense level during 2 of the consecutive frames</u></p> <ul style="list-style-type: none"> ● <u>When both of base units and codeless units get carrier sense function;</u> <u>1.4MHz-system : Less than -62dBm</u> <u>5MHz-system : Less than -56dBm</u> ● <u>When only base units get carrier sense function on behalf of codeless units ;</u> <u>1.4MHz-system : Less than -68dBm</u> <u>5MHz-system : Less than 64dBm</u> 	<p>During 2 of the consecutive frames (20msec), Less than -62dBm</p>
<p>(13)Carrier sense (2) (For the protection of control channel of PHS (ch12,ch18)*)</p>	<p><u>1.4MHz-system : less than -75dBm</u> <u>5MHz-system : -82dBm</u></p>	<p>Less than -82dBm</p>
<p>(14)Prevention of misconnection</p>	<p><u>Identification code length is more than 24bits by using IMSI</u></p>	<p>Identification code length for base units is 40bits Identification code length for codeless units or repeater is 36bits</p>

5 Proposed date of entry into force
August, 2017