
First published in the *Government Gazette*, Electronic Edition, on 31st October 2014 at 5.00 pm.

No. S 726

TELECOMMUNICATIONS ACT
(CHAPTER 323)

TELECOMMUNICATIONS
(EXEMPTION FROM SECTIONS 33, 34(1)(b) AND 35)
(AMENDMENT NO. 2) NOTIFICATION 2014

In exercise of the powers conferred by section 73 of the Telecommunications Act, the Minister for Communications and Information hereby makes the following Notification:

Citation and commencement

1. This Notification may be cited as the Telecommunications (Exemption from sections 33, 34(1)(b) and 35) (Amendment No. 2) Notification 2014 and shall come into operation on 1 November 2014.

Amendment of paragraph 2

2. Paragraph 2 of the Telecommunications (Exemption from sections 33, 34(1)(b) and 35) Notification (N 1) is amended —

- (a) by deleting the word “and” at the end of sub-paragraph (a);
- (b) by deleting the words “the Schedule” in sub-paragraph (b) and substituting the words “the First Schedule”; and
- (c) by deleting the full-stop at the end of sub-paragraph (b) and substituting a semi-colon, and by inserting immediately thereafter the following sub-paragraphs:

“(c) the installation of an equipment specified in the Second Schedule, where the installation is in accordance with the technical specifications on white space devices published by the Authority at <http://www.ida.gov.sg>; and

- (d) the operation of an equipment specified in the Second Schedule, where the operation is in accordance with the technical specifications on white space devices published by the Authority at <http://www.ida.gov.sg>.”.

Deletion of Schedule and new First and Second Schedules

3. The Schedule to the Telecommunications (Exemption from sections 33, 34(1)(b) and 35) Notification is deleted and the following Schedules substituted therefor:

“FIRST SCHEDULE

Paragraph 2(b)

EXEMPTION IN RESPECT OF
LOCALISED ON-SITE INSTALLATION OR OPERATION OF EQUIPMENT*

<i>Equipment</i>	<i>Authorised Radio Frequency Bands</i>	<i>Maximum Approved Field Strength or Power</i>
1. CB Walkie Talkie Transceivers	26.96 — 27.28 MHz	500 mW ERP
2. Multi-channel Walkie Talkie Transceivers	446.00 — 446.10 MHz	500 mW ERP
	446.3250 — 446.4750 MHz	500 mW ERP
	477.00 — 477.25 MHz	500 mW ERP
3. Wireless Microphones	0.51 — 1.60 MHz	57 dB μ V/m @ 3m
	40.66 — 40.70 MHz	65 dB μ V/m @ 10m
	88.00 — 108.00 MHz	60 dB μ V/m @ 10m
	180.000 — 200.000 MHz	112 dB μ V/m @ 10m
	470.00 — 806.00 MHz	10 mW ERP
	487.00 — 507.00 MHz	112 dB μ V/m @ 10m
4. CB Band Radio Paging Systems	26.96 — 27.28 MHz	500 mW ERP
	40.66 — 40.70 MHz	500 mW ERP
5. Induction Loop Communication Systems	0.016 — 0.150 MHz	66 dB μ A/m @ 10m
	0.150 — 5.000 MHz	13.5 dB μ A/m @ 10m
	6.765 — 6.795 MHz	42 dB μ A/m @ 10m
	7.400 — 8.800 MHz	9 dB μ A/m @ 10m
6. VHF Radio Paging System	151.125 MHz	1,000 mW ERP
	151.150 MHz	1,000 mW ERP

*Other low power equipment that operate in radio frequency bands other than those listed, but which meet the output power limits specified for the same type of equipment are exempted from licensing as long as both the output power limits and the radio frequency bands are approved by the Authority.

FIRST SCHEDULE — *continued*

<i>Equipment</i>	<i>Authorised Radio Frequency Bands</i>	<i>Maximum Approved Field Strength or Power</i>
7. Radio Detection and Alarm Systems —	0.016 — 0.150 MHz	100 dB μ V/m @ 3m
	13.553 — 13.567 MHz	94 dB μ V/m @ 10m
(a) Car Theft Alarm Systems	26.96 — 27.28 MHz	500 mW ERP
(b) Burglar Alarm Systems	146.35 — 146.50 MHz	100 mW ERP
	240.15 — 240.30 MHz	100mW ERP
(c) Field Disturbance Sensing Devices	300.00 — 300.30 MHz	100mW ERP
(d) Other	312.00 — 316.00 MHz	100mW ERP
Miscellaneous	444.40 — 444.80 MHz	100mW ERP
Radio Detection and Alarm Systems	10.50 — 10.55 GHz	117 dB μ V/m @ 10m
8. Medical and Biological Telemetry Devices	9.000 — 315.000 kHz	30 dB μ A/m @ 10m
	40.500 — 41.000 MHz	0.01 mW ERP
	216.00 — 217.00 MHz	100 mW ERP
	454.000 — 454.500 MHz	2 mW ERP
	1,427.00 — 1,432.00 MHz	100 mW ERP
	All other frequencies	25 μ W ERP
9. Wireless Modem	72.080 MHz	1,000 mW ERP
	72.200 MHz	1,000 mW ERP
	72.400 MHz	1,000 mW ERP
	72.600 MHz	1,000 mW ERP
	158.275/162.875 MHz	1,000 mW ERP
	158.325/162.925 MHz	1,000 mW ERP
	453.7250/458.7250 MHz	1,000 mW ERP
	453.7375/458.7375 MHz	1,000 mW ERP
	453.7500/458.7500 MHz	1,000 mW ERP
	453.7625/458.7625 MHz	1,000 mW ERP
10. Radio Telemetry Equipment	26.96 — 27.28 MHz	500 mW ERP
	29.700 — 30.000 MHz	500 mW ERP

FIRST SCHEDULE — *continued*

<i>Equipment</i>	<i>Authorised Radio Frequency Bands</i>	<i>Maximum Approved Field Strength or Power</i>
11. Remote Control Devices —	26.96 — 27.28 MHz	100 mW ERP
	34.995 — 35.225 MHz	100 mW ERP
(a) Garage Door Openers	40.665 — 40.695 MHz	500 mW ERP
(b) Cameras	40.770 — 40.830 MHz	500 mW ERP
(c) Toys and Robots	72.130 — 72.210 MHz	500 mW ERP
(d) Battery-operated Cars and Boats		
(e) TV Receivers/ Radio Systems		
(f) Other Miscellaneous Remote Control Devices		
12. Cordless Telephones or Wireless PABX	1.605 — 1.800 MHz	94 dB μ V/m@ 3m
	49.67 — 49.97 MHz	90 dB μ V/m @ 3m
	43.72 — 46.97 MHz	90 dB μ V/m @ 3m
	48.76 — 49.97 MHz	90 dB μ V/m @ 3m
	821.00 — 822.00 MHz	90 dB μ V/m @ 3m
	924.00 — 925.00 MHz	90 dB μ V/m @ 3m
	1,880.00 — 1,900.00 MHz	250 mW EIRP
13. Wireless LAN, RFID or Low Power Devices	433.05 — 434.79 MHz	10 mW ERP
	866.00 — 869.00 MHz	500 mW ERP
	920.00 — 925.00 MHz	500 mW ERP
	1,880.00 — 1,900.00 MHz	250 mW EIRP
	2,400.00 — 2,483.50 MHz	200 mW EIRP
	5,150.00 — 5,350.00 MHz	200 mW EIRP
	5,470.00 — 5,725.00 MHz	1 W EIRP
	5,725.00 — 5,875.00 MHz	1 W EIRP
	24,000 — 24,250 MHz	100 mW EIRP
	57,000 — 66,000 MHz	10 W EIRP

FIRST SCHEDULE — *continued*

<i>Equipment</i>	<i>Authorised Radio Frequency Bands</i>	<i>Maximum Approved Field Strength or Power</i>
14. Stand-alone GPS Receivers	1,575.420 MHz	
15. Short Range Radar System	76.00 — 77.00 GHz	37 dBm EIRP for vehicle in motion 23.5dBm EIRP for stationary vehicle
16. Hearing Aids and Audio Assistance Aids	169.40 — 175.00 MHz	500 mW ERP
17. Ultra-Wideband Devices	Below 1.60 GHz	-90 dBm/MHz
	1.60 — 2.70 GHz	-85 dBm/MHz
	2.70 — 3.40 GHz	-70 dBm/MHz
	3.40 — 4.20 GHz	-41.3 dBm/MHz with interference mitigation techniques, otherwise - 70 dBm/MHz
	4.20 — 4.80 GHz	-41.3 dBm/MHz
	4.80 — 6.00 GHz	-70 dBm/MHz
	6.00 — 9.00 GHz	-41.3 dBm/MHz
	9.00 — 10.60 GHz	-65 dBm/MHz
	10.60 — 21.65 GHz	-85 dBm/MHz
	21.65 — 29.50 GHz	-41.3 dBm/MHz
	29.50 — 77.00 GHz	-85 dBm/MHz
	77.00 — 81.00 GHz	-3 dBm/MHz
	Above 81.00 GHz	-85 dBm/MHz

SECOND SCHEDULE

Paragraph 2(c) and (d)

EXEMPTION IN RESPECT OF
INSTALLATION OR OPERATION OF EQUIPMENT

<i>Equipment</i>	<i>Authorised Radio Frequency Bands</i>	<i>Maximum Approved Field Strength or Power</i>
1. Fixed White Space Devices	181 — 188 MHz 209 — 223 MHz 502 — 518 MHz 614 — 622 MHz 630 — 710 MHz 718 — 742 MHz 750 — 774 MHz 790 — 806 MHz	4,000 m W EIRP for all authorised frequency bands
2. Portable Mode I White Space Devices	181 — 188 MHz 209 — 223 MHz 502 — 518 MHz 614 — 622 MHz 630 — 710 MHz 718 — 742 MHz 750 — 774 MHz 790 — 806 MHz	100 m W EIRP for all authorised frequency bands
3. Portable Mode II White Space Devices	181 — 188 MHz 209 — 223 MHz 502 — 518 MHz 614 — 622 MHz 630 — 710 MHz 718 — 742 MHz 750 — 774 MHz 790 — 806 MHz	100 m W EIRP for all authorised frequency bands

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Made on 8 September 2014.

AUBECK KAM
*Permanent Secretary,
Ministry of Communications
and Information,
Singapore.*

[IDA/LGL/3/3/9; AG/LLRD/SL/323/2010/4 Vol. 1]