[2002 Ed. p. 1

# TELECOMMUNICATIONS ACT (CHAPTER 323)

# TELECOMMUNICATIONS (EXEMPTION FROM SECTIONS 33, 34(1)(B) AND 35) NOTIFICATION

#### ARRANGEMENT OF PARAGRAPHS

#### Paragraph

- 1. Citation
- 2. Exemption
  The Schedules

[2nd March 2001]

#### Citation

1. This Notification may be cited as the Telecommunications (Exemption from sections 33, 34(1)(b) and 35) Notification.

## **Exemption**

- **2.** Sections 33, 34(1)(b) and 35 of the Act shall not apply to any person in respect of
  - (a) the possession, establishment, installation, maintenance, provision or operation of any network or station as defined in the Telecommunications (Radio-communication) Regulations (Rg 5) where the person has been permitted by the Authority to use any radio frequency band in respect of the network or station under regulation 75 of those Regulations;

[S 726/2014 wef 01/11/2014]

(b) the localised on-site installation or operation of the equipment specified in the First Schedule;

[S 726/2014 wef 01/11/2014]

(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

[S 726/2014 wef 01/11/2014]

(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.

[S 726/2014 wef 01/11/2014]

#### FIRST SCHEDULE

Paragraph 2(b)

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

Equipment	Authorised Radio Frequency Bands	Maximum Approved Field Strength or Power
CB Walkie Talkie     Transceivers	26.96 – 27.28 MHz	500 mW ERP
2. Multi-channel	446.00 – 446.10 MHz	500 mW ERP
Walkie Talkie Transceivers	446.3250 – 446.4750 MHz	500 mW ERP
	477.00 – 477.25 MHz	500 mW ERP
3. Wireless	0.51 – 1.60 MHz	57 dBμV/m @ 3m
Microphones	40.66 – 40.70 MHz	65 dBμV/m @ 10m
	88.00 – 108.00 MHz	60 dBμV/m @ 10m
	180.000 – 200.000 MHz	112 dBμV/m @ 10m
	470.00 – 806.00 MHz	10 mW ERP
	487.00 – 507.00 MHz	112 dBμV/m @ 10m
4. CB Band Radio	26.96 – 27.28 MHz	500 mW ERP
Paging Systems	40.66 – 40.70 MHz	500 mW ERP

<sup>\*</sup>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.

Equipment	Authorised Radio Frequency Bands	Maximum Approved Field Strength or Power
5. Induction Loop	0.016 – 0.150 MHz	66 dBμA/m @ 10m
Communication Systems	0.150 – 5.000 MHz	13.5 dBμA/m @ 10m
Systems	6.765 – 6.795 MHz	42 dBμA/m @ 10m
	7.400 – 8.800 MHz	9 dBμA/m @ 10m
6. VHF Radio Paging	151.125 MHz	1,000 mW ERP
System	151.150 MHz	1,000 mW ERP
7. Radio Detection	0.016 – 0.150 MHz	100 dBμV/m @ 3m
and Alarm Systems —	13.553 – 13.567 MHz	94 dB $\mu$ V/m @ 10m
(a) Car Theft	26.96 – 27.28 MHz	500 mW ERP
Alarm	146.35 – 146.50 MHz	100 mW ERP
Systems	240.15 – 240.30 MHz	100mW ERP
(b) Burglar Alarm	300.00 – 300.30 MHz	100mW ERP
Systems	312.00 – 316.00 MHz	100mW ERP
(c) Field	444.40 – 444.80 MHz	100mW ERP
Disturbance Sensing Devices	10.50 – 10.55 GHz	117 dBμV/m @ 10m
(d) Other Miscella neous Radio Detection and Alarm Systems		
8. Medical and	9.000 – 315.000 kHz	30 dBμA/m @ 10m
Biological Telemetry Devices	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 μW ERP
9. Wireless Modem	72.080 MHz	1,000 mW ERP

Equipment	Authorised Radio Frequency Bands	Maximum Approved Field Strength or Power
	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	26.96 – 27.28 MHz	500 mW ERP
Equipment	29.700 – 30.000 MHz	500 mW ERP
11. Remote Control	26.96 – 27.28 MHz	100 mW ERP
Devices —	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	72.130 – 72.210 MHz	500 mW ERP
Robots		
(d) Battery-		
operated Cars and Boats		
(e) TV Receivers/		
Radio		
Systems		
(f) Other Miscella		
neous		
Remote		
Control		
Devices		

Requipment   Authorised Radio Frequency Bands   Maximum Approved Field Strength or Power			
Telephones or Wireless PABX  49.67 – 49.97 MHz 43.72 – 46.97 MHz 90 dBμV/m @ 3m 90 dBμV/m @ 3m 821.00 – 822.00 MHz 90 dBμV/m @ 3m 90 dBμV/m @ 3m 821.00 – 822.00 MHz 90 dBμV/m @ 3m 90 dBμV/m @ 3m 91 dBμV/m @ 3m 91 dBμV/m @ 3m 92 dBμV/m @ 3m 90 dBμV/m @ 3m 92 dbμv/m @ 3m 90 dB	Equipment		
Wireless PABX	Telephones or	1.605 – 1.800 MHz	94 dBμV/m@ 3m
43.72 - 46.97 MHz   90 dBμV/m @ 3m		49.67 – 49.97 MHz	90 dBμV/m @ 3m
821.00 - 822.00 MHz   90 dBμV/m @ 3m   924.00 - 925.00 MHz   1,880.00 - 1,900.00 MHz   250 mW EIRP     13. Wireless LAN, RFID or Low Power Devices   866.00 - 869.00 MHz   10 mW ERP   500 mW ERP   1,880.00 - 1,900.00 MHz   250 mW EIRP   2,400.00 - 2,483.50 MHz   250 mW EIRP   2,400.00 - 2,483.50 MHz   200 mW EIRP   2,400.00 - 5,350.00 MHz   100 mW EIRP   1 W EIRP   1 W EIRP   1 W EIRP   1 W EIRP   100 mW EIRP   100 m	111111111	43.72 – 46.97 MHz	90 dBμV/m @ 3m
924.00 - 925.00 MHz   90 dBμV/m @ 3m   1,880.00 - 1,900.00 MHz   250 mW EIRP		48.76 – 49.97 MHz	90 dBμV/m @ 3m
1,880.00 - 1,900.00 MHz   250 mW EIRP		821.00 – 822.00 MHz	90 dBμV/m @ 3m
13. Wireless LAN, RFID or Low Power Devices  433.05 – 434.79 MHz 866.00 – 869.00 MHz 920.00 – 925.00 MHz 1,880.00 – 1,900.00 MHz 2,400.00 – 2,483.50 MHz 5,150.00 – 5,350.00 MHz 5,470.00 – 5,725.00 MHz 1 W EIRP 5,725.00 – 5,875.00 MHz 1 W EIRP 1,84,000 – 24,250 MHz 24,000 – 24,250 MHz 10 mW ERP 10 mW EIRP 10 mW EIRP 10 mW EIRP 200 mW EIRP 1 W E		924.00 – 925.00 MHz	90 dBμV/m @ 3m
RFID or Low Power Devices		1,880.00 – 1,900.00 MHz	250 mW EIRP
Power Devices		433.05 – 434.79 MHz	10 mW ERP
920.00 - 925.00 MHz	l .	866.00 – 869.00 MHz	500 mW ERP
2,400.00 – 2,483.50 MHz 5,150.00 – 5,350.00 MHz 5,470.00 – 5,725.00 MHz 5,470.00 – 5,725.00 MHz 1 W EIRP 1 W EI	Tower Devices	920.00 – 925.00 MHz	500 mW ERP
5,150.00 – 5,350.00 MHz 5,470.00 – 5,725.00 MHz 5,725.00 – 5,875.00 MHz 1 W EIRP 1 W EIRP 24,000 – 24,250 MHz 57,000 – 66,000 MHz 10 W EIRP 14. Stand-alone GPS Receivers 15. Short Range Radar System 76.00 – 77.00 GHz 16. Hearing Aids and Audio Assistance Aids 17. Ultra-Wideband Devices 8 J.500 mW EIRP 18 J W EIRP 19 J W EIRP 100 mW EIRP 100		1,880.00 – 1,900.00 MHz	250 mW EIRP
5,470.00 - 5,725.00 MHz		2,400.00 – 2,483.50 MHz	200 mW EIRP
5,725.00 - 5,875.00 MHz   1 W EIRP   100 mW EIRP   100 mW EIRP   100 mW EIRP   10 W EIRP		5,150.00 – 5,350.00 MHz	200 mW EIRP
24,000 - 24,250 MHz		5,470.00 – 5,725.00 MHz	1 W EIRP
57,000 - 66,000 MHz   10 W EIRP		5,725.00 – 5,875.00 MHz	1 W EIRP
14. Stand-alone GPS Receivers1,575.420 MHz15. Short Range Radar System76.00 – 77.00 GHz37 dBm EIRP for vehicle in motion23.5dBm EIRP for stationary vehicle16. Hearing Aids and Audio Assistance Aids169.40 – 175.00 MHz500 mW ERP17. Ultra-Wideband DevicesBelow 1.60 GHz 1.60 – 2.70 GHz-90 dBm/MHz -85 dBm/MHz		24,000 – 24,250 MHz	100 mW EIRP
Receivers  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 1.60 – 2.70 GHz  -90 dBm/MHz -85 dBm/MHz		57,000 – 66,000 MHz	10 W EIRP
System in motion  23.5dBm EIRP for stationary vehicle  16. Hearing Aids and Audio Assistance Aids  169.40 – 175.00 MHz  500 mW ERP  400 – 175.00 MHz  500 mW ERP  17. Ultra-Wideband Below 1.60 GHz  Devices 1.60 – 2.70 GHz -90 dBm/MHz  -85 dBm/MHz		1,575.420 MHz	
16. Hearing Aids and Audio Assistance Aids  17. Ultra-Wideband Devices  18. Hearing Aids and Audio Assistance Aids  19.40 – 175.00 MHz  500 mW ERP  -90 dBm/MHz  -90 dBm/MHz  -85 dBm/MHz		76.00 – 77.00 GHz	
Audio Assistance Aids  17. Ultra-Wideband Devices  Below 1.60 GHz 1.60 – 2.70 GHz -90 dBm/MHz -85 dBm/MHz			
Devices   1.60 – 2.70 GHz   -85 dBm/MHz	Audio Assistance	169.40 – 175.00 MHz	500 mW ERP
1.60 – 2.70 GHZ -85 dBm/MHZ		Below 1.60 GHz	-90 dBm/MHz
2.70 – 3.40 GHz -70 dBm/MHz	Devices	1.60 – 2.70 GHz	-85 dBm/MHz
		2.70 – 3.40 GHz	-70 dBm/MHz

Equipment	Authorised Radio Frequency Bands	Maximum Approved Field Strength or Power
	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
18. Intelligent Transport System —		
(a) Vehicular On-Board Unit	5,875.00 — 5,925.00 MHz	2 W EIRP

[2002 Ed. p. 7

#### FIRST SCHEDULE — continued

Equipment	Authorised Radio Frequency Bands	Maximum Approved Field Strength or Power
(b) Roadside Infrastructure (also known as Road Side Unit or Non-Vehicu lar Installation) using Dedicated Short-Range Communica tion Control	5,885.00 — 5,895.00 MHz	2 W EIRP
Channel		

[S 591/2003 wef 15/12/2003] [S 651/2004 wef 28/10/2004] [S 265/2006 wef 18/05/2006] [S 1/2008 wef 02/01/2008] [S 179/2011 wef 01/04/2011] [S 252/2013 wef 25/04/2013] [S 415/2014 wef 23/06/2014] [S 726/2014 wef 01/11/2014] [S 78/2017 wef 01/04/2017]

### SECOND SCHEDULE

Paragraph 2(c) and (d)

# EXEMPTION IN RESPECT OF INSTALLATION OR OPERATION OF EQUIPMENT

Equipment	Authorised Radio Frequency Bands	Maximum Approved Field Strength or Power
Fixed White Space     Devices	181 – 188 MHz 209 – 223 MHz 502 – 518 MHz	4,000 m W EIRP for all authorised frequency bands
	614 – 622 MHz 630 – 710 MHz	

## SECOND SCHEDULE — continued

	718 – 742 MHz	
	750 – 774 MHz	
	790 – 806 MHz	
2. Portable Mode I	181 – 188 MHz	100 m W EIRP for all authorised frequency bands
White Space Devices	209 – 223 MHz	
Bevices	502 – 518 MHz	ounds
	614 – 622 MHz	
	630 – 710 MHz	
	718 – 742 MHz	
	750 – 774 MHz	
	790 – 806 MHz	
3. Portable Mode II	181 – 188 MHz	100 m W EIRP for all authorised frequency bands
White Space Devices	209 – 223 MHz	
	502 – 518 MHz	
	614 – 622 MHz	
	630 – 710 MHz	
	718 – 742 MHz	
	750 – 774 MHz	
	790 – 806 MHz	

[S 726/2014 wef 01/11/2014]

[G.N. Nos. S 115/2001; S 525/2001]

#### LEGISLATIVE HISTORY

# TELECOMMUNICATIONS (EXEMPTION FROM SECTIONS 33, 34(1)(b) AND 35) NOTIFICATION (CHAPTER 323, N 1)

This Legislative History is provided for the convenience of users of the Telecommunications (Exemption from Sections 33, 34(1)(b) and 35) Notification. It is not part of the Notification.

1. G. N. No. S 115/2001 — Telecommunications (Exemption from sections 33, 34(1)(b) and 35) Notification 2001

Date of commencement : 2 March 2001

2. G. N. No. S 525/2001 — Telecommunications (Exemption from sections 33, 34(1)(b) and 35) (Amendment)

Notification 2001

Date of commencement : 17 October 2001

3. 2002 Revised Edition — Telecommunications (Exemption from sections 33, 34(1)(b) and 35) Notification

Date of operation : 30 September 2002

4. G. N. No. S 591/2003 — Telecommunications (Exemption from sections 33, 34(1)(b) and 35) (Amendment)

Notification 2003

Date of commencement : 15 December 2003

5. G. N. No. S 651/2004 — Telecommunications (Exemption from sections 33, 34(1)(b) and 35) (Amendment)

Notification 2004

Date of commencement : 28 October 2004

6. G. N. No. S 265/2006 — Telecommunications (Exemption from sections 33, 34(1)(b) and 35) (Amendment)

Notification 2006

Date of commencement : 18 May 2006

7. G. N. No. S 1/2008 — Telecommunications (Exemption from sections 33, 34(1)(b) and 35) (Amendment) Notification 2008

Date of commencement : 2 January 2008

8. G. N. No. S 179/2011 — Telecommunications (Exemption from Sections 33, 34(1)(b) and 35) (Amendment)

Notification 2011

Date of commencement : 1 April 2011

9. G.N. No. S 252/2013 — Telecommunications (Exemption from sections 33, 34(1)(b) and 35) (Amendment)
Notification 2013

Date of commencement : 25 April 2013

10. G.N. No. S 415/2014 — Telecommunications (Exemption from sections 33, 34(1)(b) and 35) (Amendment)
Notification 2014

Date of commencement : 23 June 2014

11. G.N. No. S 726/2014 — Telecommunications (Exemption from sections 33, 34(1)(b) and 35) (Amendment No. 2)

Notification 2014

Date of commencement : 1 November 2014

12. G.N. No. S 78/2017 — Telecommunications (Exemption from sections 33, 34(1)(b) and 35) (Amendment) Notification 2017

Date of commencement : 1 April 2017