

DEPARTMENT OF POSTS AND
TELECOMMUNICATIONS

No. 1790

17 November 1995

DECLARATION OF CERTAIN APPARATUS TO BE
AND NOT TO BE RADIO APPARATUS FOR THE
PURPOSES OF ACT No. 3 OF 1952

In terms of the powers vested in me by the definition of "radio apparatus" in section 1 of the Radio Act, 1952 (Act No. 3 of 1952), I, Zwelidinga Pallo Jordan, Minister for Posts, Telecommunications and Broadcasting, hereby declare the apparatuses mentioned in 1 to 5 below not to be radio apparatus which requires licensing in terms of the said Act. Type approval is obligatory:

- (1) Any radio transmitting set with associated receiver that operates within the frequency bands mentioned below and does not exceed the specified power limits as indicated in the second column under the heading Effective Isotropic Radiated Power (EIRP):

Frequency band	*EIRP	Examples of apparatus
(i) 10–150 kHz.....	1 W	Remote control industrial apparatus, metal detectors
(ii) 175 kHz.....	1 W	Devices used for conveying instructions to groups
(iii) 1 600–1 610 kHz.....	1 W	Baby alarms, wireless record players ✓
(iv) 26,95–27,28 MHz.....	100 mW	(a) Wireless microphones
26,995; 27,045; 27,095; 27,145 and 27,195 MHz	5 W	(b) Devices used for controlling models, toys, garage doors, cameras, projectors, etc. ✓
(v) 30,84; 33,14 and 35,02 MHz.....	1 W	Devices used for conveying instructions to groups
(vi) 36,65–36,75 MHz.....	100 mW	Wireless microphones ✓
(vii) 40,65–40,70 MHz.....	100 mW	Wireless microphones ✓
(viii) 53–54 MHz.....	5 W	(a) Devices used for controlling models
	100 mW	(b) Wireless microphones ✓
(ix) 54,4500; 54,4625; 54,4750; 54,4875; 54,5000; 54,5125; 54,5250; 54,5375; 54,5500; 60,0250; 60,0375; 60,0500; 60,0625; 60,0750; 60,0875; 60,1000; 60,1125 and 60,1250 MHz	5 W	(a) Devices used exclusively for controlling models ✓
60,1375–60,3750 MHz.....	5 W	(b) Devices used exclusively for controlling model aircraft
(x) 141–142 MHz.....	100 mW	Remote control industrial apparatus
(xi) 402–406 MHz.....	100 mW	Doppler-shift movement detectors, wireless micro- phones, garage door openers, motor car alarm systems ✓
(xii) 433,050–434,790 MHz (centre frequency 433,920 MHz)	100 mW	Remote control motor car locking systems, crane control, remote control electricity meter readers ✓
(xiii) 915 MHz ± 0,0015%.....	3 W	Anti-theft systems ✓
(xiv) 1 215–1 225 MHz.....	100 mW	Doppler-shift movement detectors
(xv) 10,025–10,700 GHz.....	100 mW	Doppler-shift movement detectors, devices used for measuring vehicle speed and surface of land
(xvi) 13,4–14 GHz.....	5 mW	Microwave fences

* EIRP means the total radiated power relative to an isotropic antenna. This is effectively the measured average output power of the final radio frequency stage immediately preceding the antenna plus the loss in the antenna cable (if any) plus the gain of the antenna (if any) relative to an isotropic antenna.

DEPARTEMENT VAN POS- EN
TELEKOMMUNIKASIEWESE

No. 1790

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VERKLARING VAN SEKERE APPARAAT WAT VIR
DIE DOEL VAN WET No. 3 VAN 1952 RADIO-APPA-
RAAT IS EN NIE IS NIE

Kragtens die bevoegdheid wat aan my verleen is by die omskrywing van "radio-apparaat" in artikel 1 van die Radiowet, 1952 (Wet No. 3 van 1952), verklaar ek, Zwelidinga Pallo Jordan, Minister vir Pos-, Telekomunikasie-, en Uitsaaiwese, hiermee dat die appaarte wat in 1 tot 5 hieronder genoem word nie radio-apparaat is wat lisensiëring ooreenkomstig die genoemde Wet benodig nie. Tipegoedkeuring is verpligtend:

- (2) Wireless spread spectrum Local Area Networks (LAN's); used for short distance on single sites e.g. in an office complex in the 2,4–2,5 GHz (ISM) band. The standard to be utilised for such systems in this band shall be ETS 300 328 or an equivalent standard. In particular, RF power requirements shall be in accordance with the standards mentioned which are broadly as follows: The maximum** effective isotropic radiated power is defined as the total power of the transmitter which is –10 dBW (100 mW). The peak power density is defined as the highest instantaneous level of power in Watts per Hertz generated by the transmitter within the power envelope. This shall be –10 dBW (100 mW) per 100 kHz EIRP for equipment using Frequency Hopping Spread Spectrum (FHSS) modulation and –20 dBW (10 mW) per MHz EIRP for other modulation types. The following conditions are applicable:

- Only equipment which has been type approved by the Postmaster General may be used. Such type approval shall require compliance with the Radio Regulations and the standard stipulated above.
- No interference may be caused to users of other ISM equipment within the band or to other radio users outside the band.
- No complaints of interference to spread spectrum systems will be investigated.
- LAN's shall be confined to the same premises/buildings and between the computer systems of the same user.

** As defined in 5.2.2 and 7.2.3 of the Standard and includes the gain of the antenna in dBi.

- (3) Wireless LAN's used for short distance, in the following other ISM bands, namely 433,050–434,790 MHz and 5 725–5 875 GHz for use on single sites e.g. in an office complex. Spread spectrum/wide band standards other than ETS 300 328 will be considered within these bands in accordance with the general principles listed in (2) for the 2,4–2,5 GHz ISM band, especially with regard to power requirements.

- (4) Cordless telephones:

CT1 In the frequency bands 914–915/959–960 MHz.

CT2 In the frequency band 864,100–868,100 MHz.

CT0 On the frequency channels 46,610/49,670 MHz; 46,630/49,845 MHz; 46,670/49,860 MHz; 46,770/49,830 MHz; 46,830/49,890 MHz; 46,670/49,930 MHz and 46,970/49,970 MHz.

The power may not exceed 10 mW and telephones must undergo the necessary tests and be type approved by the Postmaster General.

- (5) Cellular radio communication service—mobile/portable and handheld units:

(a) C450	455,500–459,460 MHz	Mobile transmit	15W
	455,500–459,460 MHz	Mobile receive	15W
*** (b) GSM	890,200–914,800 MHz	Mobile transmit	0,8–8W
	935,200–959,800 MHz	Mobile receive	0,8–8W

*** Because of the CT1 cordless telephony, these networks are not permitted to operate in the 914–915 MHz and 959–960 MHz bands.

Government Notices Nos. 2639 of 24 December 1980 and 1132 of 11 June 1982 are hereby revoked.

- (1) Enige radiosendtoestel met bybehorende ontvanger wat binne ondergenoemde frekwensiebande werk nie die gespesifiseerde kragperke oorskry wat in die tweede kolom onder die opskrif Effektiewe Isotropiese Uitgestraalde Drywing (EIUD) aangedui word nie:

Frekwensieband	*EIUD	Voorbeelde van apparaat
(i) 10–150 kHz	1 W	Afstandbeheer nywerheidsapparaat, met detektors
(ii) 175 kHz	1 W	Toestelle wat gebruik word om instruksies groepe oor te dra
(iii) 1 600–1 610 kHz	1 W	Baba-alarms, draadlose platespelers
(iv) 26,96–27,26 MHz 26,995; 27,045; 27,095; 27,145 en 27,195 MHz	100 mW	(a) Draadlose mikrofone
	5 W	(b) Toestelle wat gebruik word vir die beheer modelle, speelgoed, garagedeure, kamerprojektors, ens.