



Radiocommunications Licence Conditions (Land Mobile Licence) Determination 2015

Radiocommunications Act 1992

The AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY makes this Determination under paragraph 107(1)(f) of the *Radiocommunications Act 1992*.

Dated: 11th June 2015

Chris Chapman
[signed]
Member

Richard Bean
[signed]
Member / ~~General Manager~~

Australian Communications and Media Authority

Part 1 – Preliminary

1 Name of Determination

This Determination is the *Radiocommunications Licence Conditions (Land Mobile Licence) Determination 2015*.

2 Commencement

This Determination commences on the day after it is registered.

Note All legislative instruments must be registered on the Federal Register of Legislative Instruments required to be maintained under the *Legislative Instruments Act 2003*.

2A Revocation

The *Radiocommunications Licence Conditions (Land Mobile Licence) Determination No. 1 of 1997* [F2005B01216] is revoked.

3 Application

- (1) For the purposes of paragraph 107(1)(f) of the Act, this Determination sets out conditions to which a land mobile licence is subject, in the following manner:
 - (a) every land mobile licence (paging system station) is subject to the conditions on the operation of a paging system under the licence in Part 2;
 - (b) every land mobile licence (ambulatory station) is subject to the conditions on the operation of an ambulatory station under the licence in Part 3;
 - (c) every land mobile licence (land mobile system station) is subject to the conditions on the operation of a land mobile system station under the licence in Part 4;
 - (d) every land mobile licence (PABX cordless telephone service) is subject to the conditions on the operation of a land station under the licence in Part 5;
 - (e) every land mobile licence (CB repeater station) is subject to the conditions on the operation of a CB repeater station under the licence in Part 6; and
 - (f) every land mobile licence is subject to the condition on the operation of a station under the licence in Part 7.
- (2) If a condition in this Determination is inconsistent with a condition specified in the licence, the condition specified in the licence applies.

4 Interpretation

- (1) In this Determination, unless the contrary intention appears:
base station, in relation to a licence, means the land station to which the licence relates that is established at a fixed point on land mentioned in the licence.

bi-directional amplifier system means a land station, specified in a land mobile licence (land mobile system station), that:

- (a) is established for communication within the licensed land mobile system stations to provide coverage in an enclosed area;
- (b) can be used with leaky feeder cable; and
- (c) consists of:
 - (i) one or more transmitters that transmit on frequencies used by the base station and mobile stations in the land mobile system; or
 - (ii) one or more receivers that receive on frequencies used by the base station and mobile stations in the land mobile system.

CB means a citizen band radio service.

exterior paging system means a paging system in an exterior paging application, whether or not the system includes an interior paging system operating on the same frequency.

interior paging system means a paging system in an interior paging application.

land mobile licence (ambulatory station) means a land mobile licence authorising an operator to operate an ambulatory station.

land mobile licence (CB repeater station) means a land mobile licence authorising an operator to operate a CB repeater station.

land mobile licence (land mobile system station) means a land mobile licence authorising an operator to operate a land mobile system station.

land mobile licence (PABX cordless telephone service) means a land mobile licence authorising an operator to operate a land station in a PABX cordless telephone service.

land mobile licence (paging system station) means a land mobile licence authorising an operator to operate a paging system station.

licence means:

- (a) a land mobile licence (ambulatory station);
- (b) a land mobile licence (CB repeater station);
- (c) a land mobile licence (land mobile system station);
- (d) a land mobile licence (PABX cordless telephone service); or
- (e) a land mobile licence (paging system station);

or any combination of them, as the context requires.

main station means the land station, to which a land mobile licence (paging system station) relates, established for one way communications with:

- (a) 1 or more land stations; or
- (b) 1 or more paging receivers;

in a paging system.

operator, in relation to a licence, means:

- (a) the licensee; and
- (b) any person authorised under section 114 of the Act by the licensee to operate a station under the licence.

overlay paging receiver means a device that is capable of receiving paging information from the base station of a land mobile system.

PABX means a private automatic branch exchange.

remote control station means a land station established to achieve remote control of 1 or more other land stations used for communicating with land mobile stations.

supplementary base station means a land station established for use with a land mobile system's base station.

supplementary main station means a land station established for use with a paging system's main station.

time out timer means a function that disables the transmitter of a mobile or remote control station after a predetermined time.

transportable CB repeater station means a CB repeater station that is not permanently established at a location.

Note 1 In accordance with paragraph 13(1)(b) of the *Legislative Instruments Act 2003*, other expressions in this Determination have the same meaning as in the Act, including:

- ACMA (see section 5)
- device (see section 9)
- interference (see section 5)
- permit (see section 5)
- standard (see section 5)
- transmitter (see section 8)

Note 2 Other terms used in this Determination may be defined in the *Radiocommunications (Interpretation) Determination 2015*, including:

- Act
- ambulatory station
- ambulatory system station
- carriage service provider
- carrier
- CB repeater station
- EIRP
- exterior paging
- harmful interference
- HF
- interior paging
- land mobile licence
- land mobile station
- land mobile system
- land mobile system station
- land station
- MF
- mobile station
- PABX cordless telephone service
- paging receiver
- paging system
- paging system station
- telecommunications network
- UHF
- VHF

- (2) In this Determination, unless the contrary intention appears, a reference to another legislative instrument is a reference to that other legislative instrument as in force from time to time.

Note 1 For reference to Commonwealth Acts, see section 10 of the *Acts Interpretation Act 1901*; and see also subsection 13(1) of the *Legislative Instruments Act 2003* for the application of the *Acts Interpretation Act 1901* to legislative instruments, and section 314A of the Act.

Note 2 All Commonwealth Acts and legislative instruments are available on the ComLaw website at <http://www.comlaw.gov.au>.

Part 2 – Conditions for Land Mobile Licence (Paging System Station)

5 Exterior paging system transmitters

- (1) If a transmitter in an exterior paging system operates in the temperature range of 0°C to 60°C (inclusive), the operator must ensure that:
- (a) a discrete spurious emission from a transmitter in the exterior paging system is not more than minus 30 dBm at the transmitter radiofrequency output and the antenna input; and
 - (b) the broad band noise floor of a transmitter in the exterior paging system in a bandwidth of 16 kHz at frequency offsets greater than 300 kHz from the frequency specified in the licence does not exceed minus 47 dBm.
- (2) If a transmitter in an exterior paging system is operating with an EIRP not exceeding 500 watts in the temperature range of 0°C to 60°C (inclusive), an out-of-band emission from the transmitter must be attenuated below the unmodulated carrier power:
- (a) by at least 23 dB at 12.5 kHz from the frequency specified in the licence, decreasing linearly to 50 dB at 14 kHz from the frequency specified in the licence;
 - (b) by at least 50 dB on any frequency removed from the frequency specified in the licence by more than 14 kHz but not more than 39 kHz; and
 - (c) by at least 60 dB on any frequency removed from the frequency specified in the licence by more than 39 kHz.
- (3) If a transmitter in an exterior paging system is operating with an EIRP between 500 watts and 1000 watts (inclusive) in the temperature range of 0°C to 60°C (inclusive), an out-of-band emission from the transmitter must be attenuated below the unmodulated carrier power:
- (a) by at least 23 dB at 12.5 kHz from the frequency specified in the licence, decreasing linearly to 53 dB at 14 kHz from the frequency specified in the licence;
 - (b) by at least 53 dB on any frequency removed from the frequency specified in the licence by more than 14 kHz but not more than 39 kHz; and
 - (c) by at least 63 dB on any frequency removed from the frequency specified in the licence by more than 39 kHz.

6 Exterior paging system: supplementary main station

If an operator operates a supplementary main station in an exterior paging system, the operator:

- (a) must not operate the station if its operation causes harmful interference to a service provided by another station;
- (b) must only operate the station to transmit using the transmit frequency specified in the licence for the system's main station;
- (c) must only operate the station to improve the service reliability within a radius of 40 kilometres of the system's main station;
- (d) must not operate the station to extend the service area of the system's main station beyond 40 kilometres from the main station; and
- (e) must not operate the station unless the licensee has notified the ACMA, in writing, about the location and the operating parameters of the station.

7 Exterior paging system using an interior paging transmitter

If an operator operates a transmitter in an interior paging system as part of an exterior paging system, the operator:

- (a) must not operate the transmitter if its operation causes harmful interference to a service provided by another station;
- (b) must only operate the transmitter to transmit using the transmit frequency specified in the licence for the system's main station;
- (c) must operate the transmitter using an EIRP not exceeding 8.3 watts;
- (d) must ensure that, if the transmitter is operated using an external antenna, the antenna is located not more than 10 metres above ground level;
- (e) must only operate the transmitter to improve the service reliability within a radius of 40 kilometres of the system's main station; and
- (f) must not operate the transmitter to extend the service area of the system's main station beyond 40 kilometres from the main station.

8 Interior paging system

If an operator operates a transmitter in an interior paging system, the operator:

- (a) must not operate the transmitter if its operation causes harmful interference to a service provided by another station; and
- (b) must operate the transmitter so that its emissions are confined to within the premises or restricted area specified in the licence.

9 Interior paging system: talkback

If an operator operates a mobile station in an interior paging system, the licensee must only operate the mobile station using:

- (a) an EIRP not exceeding 250 milliwatts;
- (b) a necessary bandwidth not exceeding 16 kHz; and
- (c) the frequency:
 - (i) if the paging system transmits on 40.680 MHz – 40.680 MHz;
 - (ii) if the paging system transmits on 40.750 MHz – 40.750 MHz; or
 - (iii) in any other case – 153.800 MHz.

Part 3 – Conditions for Land Mobile Licence (Ambulatory Station)

10 Harmful interference

An operator must not operate an ambulatory station if its operation causes harmful interference to a service provided by another station.

11 Communications with other stations

- (1) Subject to subsection (2), an operator must only operate an ambulatory station (the *first station*) to communicate with another ambulatory station operated by the operator.
- (2) Subsection (1) does not apply if the licence for the first station specifies the stations the operator may communicate with, using the first station.

12 Time out timers

The operator must not operate an ambulatory station that includes a time out timer unless the time out timer is enabled.

13 Call signs

- (1) The operator of an ambulatory station operating in a MF or HF band must:
 - (a) use the call sign specified by the ACMA; and
 - (b) transmit the call sign at the start of each transmission or series of transmissions.
- (2) The licensee of an ambulatory station operating in a VHF or UHF band must:
 - (a) use:
 - (i) the call sign specified by the ACMA; or
 - (ii) another form of identification that clearly identifies the station; and
 - (b) transmit the call sign or form of identification at the start of each transmission or series of transmissions.

Part 4 – Conditions for Land Mobile Licence (Land Mobile System Station)

14 Time out timers

The operator must not operate a land mobile system station that includes a time out timer unless the time out timer is enabled.

15 Call signs

- (1) The operator of a land mobile system station operating in a MF or HF band must:
 - (a) use the call sign specified by the ACMA; and
 - (b) transmit the call sign at the start of each transmission or series of transmissions.

- (2) The operator of a land mobile system station operating in a VHF or UHF band must:
 - (a) use:
 - (i) the call sign specified by the ACMA; or
 - (ii) another form of identification that clearly identifies the station; and
 - (b) transmit the call sign or form of identification at the start of each transmission or series of transmissions.

16 Land mobile stations: EIRP

- (1) Subject to subsection (2), if an operator operates a land mobile station, the operator must operate the transmitter using an EIRP not exceeding 41 watts.
- (2) If the operator operates a land mobile station:
 - (a) inside the premises or restricted area specified in the licence – the licensee must operate the transmitter using an EIRP not exceeding 8.3 watts;
 - (b) inside the premises or restricted area specified in the licence in association with the operation of a crane – the licensee must operate the transmitter using a power not exceeding 1 watt pY;
 - (c) in a MF or HF band – the licensee must operate the transmitter using an EIRP not exceeding 100 watts.

17 Land mobile stations: permitted communications and frequencies

- (1) If an operator operates a land mobile system on 1 frequency only, the operator must only operate each land mobile station in the system:
 - (a) to communicate with the base station, supplementary base station and other land mobile stations in the system; and
 - (b) to transmit to those stations using the transmit frequency of the system's base station.
- (2) If an operator operates a land mobile system on more than 1 frequency, the operator must only operate each land mobile station in the system:
 - (a) to communicate with the base station, supplementary base station, other land mobile stations and remote control stations in the system;
 - (b) to transmit to the base station, supplementary base station and remote control stations using the receive frequency of the system's base station; and
 - (c) to communicate with other land mobile stations using the transmit frequency of the system's base station.

18 Supplementary base stations

- (1) If an operator operates a supplementary base station in a land mobile system, the operator:
 - (a) must not operate the station if its operation causes harmful interference to a service provided by another station;
 - (b) must only operate the station to transmit using the transmit frequencies specified in the licence for the system's base station;

- (c) must only operate the station to improve the service reliability within a radius of 40 kilometres of the system's base station;
 - (d) must not operate the station to extend the service area of the system's base station beyond 40 kilometres from the base station;
 - (e) must not operate the station unless the licensee has notified the ACMA, in writing, about the location and the operating parameters of the station.
- (2) Subsection (3) applies if a supplementary base station is operated at:
 - (a) a communal site; or
 - (b) a site in, or adjacent to, the central business district of a city or town.
- (3) An operator must operate the station so that:
 - (a) the level of all discrete spurious components caused by the station does not exceed minus 30 dBm when measured at the connection to the station's antenna; and
 - (b) the broad band noise floor of the transmitter does not exceed minus 47 dBm in a 16 kHz bandwidth for frequency offsets greater than 300 kHz from the frequency specified in the licence when measured at the connection to the station's antenna.

19 Remote control stations

- (1) If an operator operates a remote control station in a land mobile system, the operator:
 - (a) must not operate the station if its operation causes harmful interference to a service provided by another station;
 - (b) must only operate the station to communicate with land mobile stations and overlay paging receivers in the system through the system's base station and supplementary base stations;
 - (c) must only operate the station to transmit using the receive or transmit frequencies used by the land mobile stations in the system to communicate with the system's base station; and
 - (d) must not operate the station using a transmitter power exceeding:
 - (i) the power specified in the licence; or
 - (ii) if no power is specified in the licence – 1 watt pY.
- (2) If a remote control station is located in, or adjacent to, a central business district of a city or town, an operator:
 - (a) must not locate the antenna of the station more than 30 metres above the average surrounding ground level; and
 - (b) must fit a device between the transmitter and the antenna that provides intermodulation performance equivalent to, or better than, the intermodulation performance achieved by a 20 dB in-line attenuator.

20 Overlay paging receivers

An operator must not operate a land mobile system station unless the number of overlay paging receivers used in the system is less than the number of land mobile stations in the system (excluding any land mobile stations that are also overlay paging receivers).

21 Bi-directional amplifier system

- (1) An operator must not operate a bi-directional amplifier system unless the operator has notified the ACMA, in writing, about the location and operating parameters of the system.
- (2) An operator must not operate a bi-directional amplifier system, or a transmitter that is externally linked to the bi-directional amplifier system, using a power exceeding 1 watt pY.
- (3) For a transmitter that is externally linked to a bi-directional amplifier system:
 - (a) if the transmitter is located in a central business district of a city or town – an operator must fit a device between the transmitter and the antenna that provides intermodulation performance equivalent to, or better than, the intermodulation performance achieved by a 20 dB in-line attenuator;
 - (b) if the transmitter is used for communicating with the base station of the land mobile system – the antenna of the transmitter must be a directional antenna with a minimum gain equivalent to that of a 6 element Yagi antenna.

Part 5 – Conditions for Land Mobile Licence (PABX Cordless Telephone Service)**22 Harmful interference**

An operator must not operate a land station in a PABX cordless telephone service if its operation causes harmful interference to a service provided by another station.

23 Devices with which a PABX cordless telephone service may communicate

An operator must only operate a land station in a PABX cordless telephone service to communicate with the following devices:

- (a) a base station associated with, or connected to, the PABX;
- (b) a cordless telephone unit the operation of which is authorised by the *Radiocommunications (Cordless Communication Devices) Class Licence 2014*.

Part 6 – Conditions for Land Mobile Licence (CB Repeater Station)**24 Connection to a telecommunications network**

An operator must not, directly or indirectly, connect a CB repeater station to a carrier's, or a carriage service provider's, telecommunications network.

25 Operating requirements

- (1) An operator must not operate a CB repeater station unless it is operated:
 - (a) to receive signals and re-transmit those signals; or
 - (b) to transmit a signal that identifies the station.
- (2) A CB repeater station must incorporate a device that prevents the transmission of a signal in the absence of a received signal.

26 Accessibility

An operator must not operate a CB repeater station using coding equipment to limit access to the station.

27 Continuous use of a CB repeater station

- (1) Subject to subsection (2), an operator must operate a CB repeater station in a manner that provides a continuously available service to a person who operates a CB station under the *Radiocommunications (Citizen Band Radio Stations) Class Licence 2015*.
- (2) An operator must not operate the station, or continue to transmit from the station, if:
 - (a) there is a malfunction in the station; or
 - (b) the operation of the station causes harmful interference to a service provided by another station.

28 Transportable CB repeater stations: restrictions on operation

- (1) An operator must not operate a transportable CB repeater station if its operation causes harmful interference to a service provided by another station.
- (2) If a CB repeater station is operating on:
 - (a) the carrier frequency 476.525 MHz (channel 5) – an operator must not operate a transportable CB repeater station within 70 kilometres of the CB repeater station;
 - (b) a carrier frequency other than 476.525 MHz (channel 5) – an operator must not operate a transportable CB repeater station within 100 kilometres of the CB repeater station.
- (3) An operator must not operate a transportable CB repeater station at a particular location unless the ACMA approves of the operation of the station at the location before the operator starts to operate the station at the location.

29 Charge for use of CB repeater station

An operator must not impose any charge or penalty, or ask for payment of any kind, for the use of a CB repeater station.

30 Call sign

- (1) An operator must operate a CB repeater station by transmitting the call sign specified by the ACMA:
 - (a) at least once in each 5 minute period of operation of the station; and
 - (b) by morse code signal or by a synthesised voice.

- (2) If the licensee transmits the call sign by a morse code signal, the signal must be transmitted:
- (a) using a modulating tone in the frequency range 700 to 3000 Hz (inclusive); and
 - (b) at a rate not less than 10 words per minute and not greater than 20 words per minute.

Part 7 – Condition for every Land Mobile Licence

31 Compliance with applicable standards

An operator must not operate a transmitter or receiver under a licence unless the operation of the transmitter or receiver complies with each standard that applies to the transmitter or receiver.