Interference to mobile phone networks

citizenacma

Interference to the mobile network can cause mobile calls to drop out. It can also affect data speeds and mobile network performance.

As interference has the potential to prevent calls from being made to Triple Zero, it can pose a serious risk to public safety and lives in an emergency.

This fact sheet explains the potential causes of interference to mobile phone networks—most of which are inadvertent—and what you should do if you're contacted by a mobile network operator about interference to their network.

Interference explained

The following are common causes of mobile network interference.

Unauthorised mobile phone repeaters

A mobile phone repeater is a radiocommunications device designed to wirelessly regenerate or 'repeat' a mobile network signal, and in doing so, provides mobile coverage to areas where the signal from the network may be weaker.

Licensed mobile network operators use repeaters as part of their overall network management and deployment program. Repeaters operate within the radiofrequency bands that are licenced to mobile network operators.

It is illegal to operate an unlicensed mobile phone repeater. If you are not authorised by your mobile network operator to use a mobile phone repeater, any operation will likely be unlicensed. Without this authorisation, the device has the capacity to cause substantial interference to the mobile network because it's not coordinated with other radiocommunications infrastructure in the mobile network.

Illegal mobile phone boosters

Mobile phone boosters are different to repeaters. Boosters are devices that can be physically attached, via a cable, to a single mobile phone, with the aim of 'boosting' the received mobile network signal.

The operation (or possession for the purpose of operation) of mobile phone boosters is prohibited. These boosters can significantly disrupt the operation of mobile networks and prevent access to mobile services by other users. This can have very serious consequences for anyone nearby trying to make a call, particularly in an emergency.

TV antennas with masthead and distribution amplifiers

Masthead and distribution amplifiers are sometimes used in television reception systems to increase the level of signal received at a television set. However, television masthead and distribution amplifiers can sometimes produce radio signal interference.

Incorrect use or faulty amplifiers can affect broadcast television reception, mobile phone networks and two-way radio communications systems.

The person who owns or operates a masthead amplifier or distribution amplifier is responsible for any interfering signals that it radiates. This applies, even in cases where the owner or operator is unaware that their television receiving system includes an amplifier.

Devices designed for use overseas

Have you bought a radiocommunications device such as a two-way radio, cordless phone, wireless headphones, security camera or a wireless modem online or while overseas? This device may not be legal to use in Australia. Devices made for overseas markets may use the incorrect frequency for Australia, and interfere with mobile phone networks and important radiocommunications services.

Role of the ACMA

The Australian Communications and Media Authority (the ACMA) is the Australian Government agency responsible for regulating telecommunications and radiocommunications, including mobile phone networks and interference to mobile phone networks in Australia.

You may have been contacted by a mobile network operator because they have traced a source of interference to their network, which they believe is located on your premises.

The ACMA encourages you to be co-operative with the mobile network operator to identify and manage any interference in the first instance.

You should be aware that if the interference cannot be resolved co-operatively, the network operator may escalate the matter to the ACMA for investigation, or independently seek a remedy through the courts.

The ACMA may exercise certain powers to resolve interference issues, including:

- applying to a magistrate for a search warrant
- conducting emergency searches or seizures
- entering unoccupied premises and adjusting transmitters in emergencies.

What are the penalties?

It is an offence under the *Radiocommunications Act 1992* to operate an unlicensed radiocommunications device. It is also an offence to possess an unlicensed radiocommunications device for the purpose of operation. An individual found guilty of either offence may be imprisoned for up to two years for each offence, or receive a penalty of up to $25,200 (120 penalty units) per offence. Similarly, a body corporate may receive a penalty of up to $315,000 (1,500 penalty units) per offence.

The Act also provides that a person is guilty of an offence if the person engages in conduct, and the person is reckless as to whether the conduct will result in:

- substantial interference with radiocommunications; or
- substantial disruption or disturbance of radiocommunications.

An individual found guilty of this offence may by imprisoned for up to one year or receive a penalty of up to $12,600 (60 penalty units) per offence. Body corporates may receive a penalty of up to $63,000 per offence.

More information

- For more information about interference, please call the ACMA's Customer Service Centre between 9 am and 5 pm on 1300 850 115 or email info@acma.gov.au.