



5G mobile networks

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5G is the next generation of mobile network technology and is expected to provide improved:

- downloads—speeds many times faster than 4G technology
- latency—sending and receiving information from your device faster than ever before
- connectivity—supporting more devices to connect to multiple networks at the same time
- energy usage—more energy efficient.

These features will enable more advanced applications and technologies to be used, such as virtual reality, self-driving cars, and smart technologies in your home and business.

Facilities to support the 5G network will still need to comply with all relevant Government regulations.

Installing telecommunications infrastructure

- Facilities need to be installed and upgraded to support new mobile technologies. As carriers start to build 5G networks you may see some activity in your area.
- Carriers may install telecommunications facilities under state, territory and local planning laws. A carrier may need to submit an application for planning approval, which the council will consider and make a decision on.
- Carriers can install *low-impact facilities* (LIFs) under the Commonwealth's powers and immunities framework.
- Carriers installing LIFs have certain obligations, such as notification and objections procedures. Carriers must meet certain requirements, such as restoring the land and acting in accordance with good engineering practice.

Find out more at www.communications.gov.au/carrier-powers-and-immunities.

Electromagnetic energy (EME)

Telecommunications devices use EME to connect to nearby facilities to send and receive voice and data information.

Carriers must follow safety standards set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). The ARPANSA RF Standard:

- is based on decades of international and Australian scientific research
- protects people of all ages and health status
- identifies the levels at which harmful health effects can occur and sets exposure limits well below those levels.

Find out more about the regulation of EME at: www.acma.gov.au/our-rules-eme.

Find out more about the ARPANSA safety standards at: www.arpansa.gov.au/regulation-and-licensing/regulatory-publications/radiation-protection-series/codes-and-standards/rps3.

Where is 5G being installed?

You can use the Radio Frequency National Site Archive (RFNSA) website to search for active and proposed mobile phone base station sites in Australia. Each site has a dedicated information page that includes the site's location, an Environmental EME Report, the carrier's contact details, and other relevant community consultation information. Access the RFNSA website at: www.rfnsa.com.au.

To locate 5G-specific sites, use the filter to refine your search. The site entry will have different mobile generations noted in circles below the description:



A black circle means the indicated mobile technology is active.



A blue circle means a carrier is preparing to install the indicated mobile technology within the next 12 months.

Where can I find more information?

Telecommunications and EME regulation:

Australian Communications and Media Authority: www.acma.gov.au/our-rules-eme.

EME and health science

ARPANSA: www.arpansa.gov.au

The World Health Organization: www.who.int/peh-emf/en

You can also contact a telecommunications carrier directly for more information about a particular site, device or facility within its network. Below is a list of the major Australian providers:

Telstra: www.telstra.com.au/consumer-advice/eme

Optus: www.optus.com.au/about/sustainability/environment/our-environmental-responsibility/mobile-phone-towers

Vodafone: www.vodafone.com.au/support/network/base-stations, and

TPG Telecom: www.tpg.com.au/support/contact.