



Australian Government

THE SCIENCE OF
SAFE
CONNECTION



Telecommunications infrastructure near your home

Telecommunications infrastructure: keeping you safe and connected

For most of us, digital connectivity and communications technologies are part of everyday life.

Our experience through the pandemic means access to quality and reliable telecommunications services are more important than ever, keeping us connected with family and friends, and enabling many of us to learn and work from home.

While our fixed line internet services stood up well in the pandemic, it has been just as important for telecommunications companies (Telcos) to expand and improve their mobile networks to support our increasing need for digital connectivity.

Continuing to improve our digital connectivity

Telcos often need to install new equipment or infrastructure in our communities to provide effective coverage and capacity where and when we need it.

It is understandable some people are concerned about the electromagnetic energy (EME) emitted by telecommunications infrastructure, particularly when it is installed nearby in our local communities.

The Australian Government strictly regulates EME emissions to protect the health and safety of all members of the public, while allowing the community to benefit from modern telecommunications.

How we keep communities safe

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is an independent government agency that provides advice to the Government on radiation protection. ARPANSA updated its Standard for Limiting Exposure to Radiofrequency Fields – 100 kHz to 300 GHz (the Standard), based on the most up-to-date Australian and international peer-reviewed research into EME.



The Standard protects people of all ages and health status against all known adverse health effects from exposure to EME by specifying strict safety limits for exposure levels with which telecommunications services must comply, including 5G.

The Australian Communications and Media Authority (ACMA) sets and actively monitors rules for telecommunications companies to follow based on ARPANSA's Standard so EME is kept at safe levels. In Australia, all telecommunications infrastructure and equipment must comply with these rules and a series of sanctions can be imposed if these rules aren't followed.



Monitoring EME emissions

The ACMA is monitoring EME emissions from a selected sample of representative sites across Australia, and have compared their results against both the ARPANSA safety limit and carriers' predicted EME assessments. ACMA's measurements have to-date found all sites tested are well below the safety limit specified in the Standard and significantly lower than the carriers' predicted levels. ACMA's findings are available at www.acma.gov.au.

With these measures in place ensuring EME exposure from telecommunications infrastructure is below the safety limits, there is no advantage requiring transmitters to be located any particular distance from residential areas.

So, if there is telecommunications infrastructure near you, not only will you have access to more reliable connectivity but you can be reassured the technology making that connection possible is researched, regulated and safe.



For more information visit

www.eme.gov.au



What key information do I need to know?



Telcos expand and improve their mobile networks to support our increasing need for digital connectivity. They often need to install new equipment or deploy new infrastructure in our communities.



It is understandable some people are concerned about the electromagnetic energy (EME) emitted by telecommunications infrastructure, but the Australian Government strictly regulates EME emissions to protect the health and safety of all members of the public.



There are measures in place to ensure that EME exposures from telecommunications infrastructure are below the safety limits.