



Australian Government

Fact sheet

Electromagnetic energy (EME) and how it relates to wireless communications.



**Electromagnetic
energy.
Researched.
Regulated.
Safe.**

This factsheet is designed to help you better understand electromagnetic energy (EME) and how it relates to wireless communications like Wi-Fi and 5G. The facts, and only the facts. Radio waves are a type of EME and have been used by wireless communications for more than 100 years. It is now, and always will be researched, regulated and safe.

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Researched.

Scientists from across the globe have been working together for decades to understand the facts around radio waves and EME.

In fact, EME is one of the most studied sources of energy in the world. Since 1999, the Australian Government has provided over \$16.4 million in research grants to Australian Universities and associated bodies to conduct research to ensure we know as much as we can about EME from wireless communication.

Regulated.

Australia has strict standards covering acceptable levels of EME from wireless communications. These standards are set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

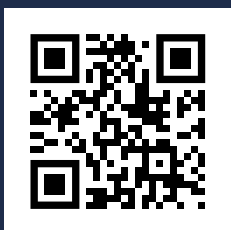
Australia's strict EME standards were updated by ARPANSA as recently as March 2021, informed by the latest local and international scientific research.

These standards are enforced by the Australian Communications and Media Authority (ACMA). ACMA checks EME compliance through record audits, investigations, site inspections and testing.

Safe.

Scientifically, EME is known as non ionising radiation and it's the same kind of energy your toaster uses.

Research continues to show, and regulation continues to ensure, that EME radio waves from telecommunications are not hazardous to human health. The telegrams your great-grandparents sent and received in their day relied on EME. 3G, 4G and 5G are just modern equivalents.



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