

Australian Government Australian Radiation Protection and Nuclear Safety Agency

Fact Sheet

Smart Meters and Health

There is no established scientific evidence that the low level RF EME exposure from smart meters causes any health effects.

Introduction

Smart meters (also called Advanced Metering Infrastructure) measure electricity usage and communicate this information back to the supplier using short bursts of radio waves or low level radiofrequency (RF) electromagnetic energy (EME).

Are the RF EME emissions from smart meters regulated in Australia?

The RF EME emissions from smart meters and other wireless devices used for communication are regulated by the Australian Communications and Media Authority (ACMA). The ACMA's regulatory arrangements require wireless devices to comply with the exposure limits in the ARPANSA RF Standard. The ARPANSA Standard is designed to protect people of all ages and health status against all known adverse health effects from exposure to RF EME. The ARPANSA Standard is based on scientific research that shows the levels at which harmful effects occur and it sets limits, based on international guidelines, well below these harmful levels.

State and territory governments are directly responsible for the planning and regulation of electricity supply infrastructure such as smart meters.

How much RF EME are people exposed to from smart meters?

The combination of the relatively low power of the smart meter transmitters, their location on the outside of buildings and the very short time spent transmitting

means that the overall RF EME exposure from smart meters is very low and well below the limits of the ARPANSA RF Standard, even when a number of devices are communicating simultaneously.

Do smart meters cause any health effects?

Health authorities around the world, including ARPANSA and the World Health Organization (WHO), have examined the scientific evidence regarding possible health effects from smart meters. Current research indicates that there are no established health effects from the low exposure to the RF EME from smart meters.

There have been anecdotal reports into potential health effects of exposure to RF EME from smart meters claiming of a variety of ill effects that have been generally termed 'electromagnetic hypersensitivity' or EHS. ARPANSA and the WHO are not aware of any EHS symptoms being confirmed as due to RF EME exposure in well conducted scientific investigations.

Conclusion

There is no established scientific evidence that the low level RF EME exposure from smart meters causes any health effects including symptoms of ill health communicated by some people.

ARPANSA will continue to review the research into potential health effects of RF EME emissions from smart meters and other sources in order to provide accurate and up-to-date advice.

Useful Links

ARPANSA fact sheet on RF EME www.arpansa.gov.au/RadiationProtection/basics/rf.cfm The ARPANSA RF Standard

www.arpansa.gov.au/Publications/codes/rps3.cfm

ARPANSA Preliminary Measurements of Radiofrequency Transmissions from a Mesh Radio Smart Meter www.arpansa.gov.au/Publications/technicalreports/ index.cfm#TR163

Victorian Government Smart Meter Program www.smartmeters.vic.gov.au

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