

Frequently Asked Questions

Are these measured levels accurate?

The measurements are undertaken by an independent and accredited RF measurement expert using calibrated equipment to provide the utmost confidence in the results from the measurement program. The modelled and measured levels are determined using the Australian Mobile Telecommunications Association (AMTA) RBS measurement protocol which is closely based on the measurement protocol used by Australia's expert authority, ARPANSA, when conducting their own ARPANSA Base Station Survey 2007-2013 (see [ARPANSA Base Station Survey](#)).

What is the Radio Frequency National Site Archive?

The Radiofrequency National Site Archive (RFNSA) is a publicly accessible database of all the Carriers' mobile phone base station facilities throughout Australia. Data available for each site includes location details, Carriers and systems present at the site, safety procedures and compliance details and, importantly, the ARPANSA Environmental EME Report for that site. See www.rfnsa.com.au and search by site address or site number for more details.

What are the typical EME levels in Australia?

Based on the measurement survey results, typical EME levels in Australia are many times below the Australian safety standard (ARPANSA RPS3 General Public Limits). Averaged over all sites measured in the MCF survey, the typical level of EME in Australia is about 0.4% of (or 250 times less than) the Australian standard. Even when adjusted for worst case conditions (which will almost never occur), the level is only 1.4% of (or about 70 times less than) the Australian standard. Remember also that the sites selected were already in the highest 10% of all sites in Australia, so levels from more typical sites will be even less – in the Melbourne example the total EME level from the mobile base station was only 0.003% (over 30,000 times below the limit).

What does ARPANSA say about measured EME from mobile base stations?

In December 2016, ARPANSA published a study investigating exposure of children to Wi-Fi in school environments. Although concentrating on exposure to RF EME from the Wi-Fi access points installed in schools, ARPANSA also took the opportunity to compare this exposure to other sources of RF EME in the environment including mobile phone networks.

The findings of the study were overwhelmingly reassuring – not only were all exposures hundreds or thousands of times below ARPANSA’s own RF exposure safety limits, but measurements also showed that exposure to RF EME from mobile networks was comparable to all other sources of RF EME, and therefore of no more concern than well accepted technologies such as broadcast radio and TV. EME from mobile base stations was on average 0.002% of (or 500,000 times less than) the Australian safety standard.

To find out more about ARPANSA’s study, see:

<https://www.arpansa.gov.au/research/surveys/wi-fi-in-schools-measurement-study>