



WHO International EMF Project

Report on EMF activities in Australia during 2012-2013

ARPANSA EMF Activities

ELF magnetic fields from electrical power infrastructure and RF emissions from smart-meter technology remain the main focus of public concern as seen by ARPANSA. There is also concern regarding mobile telephony and particularly amongst those living near proposed mobile phone and computer network base stations. The introduction of millimetre-wave body scanners at international airports has also drawn some attention.

Public Information

ARPANSA has continued publishing on its web site monthly summaries (with select comments), on recent scientific papers dealing with EMF/EMR and health. The papers are selected on the basis of importance to the protection of health, on perceived likely interest to the wider public and where Australian research is reported. The summaries are available at

<http://www.arpansa.gov.au/RadiationProtection/EMR/literature/index.cfm>.

In order to address requests from the public on ways of reducing personal exposure to RF, ARPANSA has published a new fact sheets on how to reduce exposure from mobile phones and other devices,

http://www.arpansa.gov.au/RadiationProtection/Factsheets/is_Wireless.cfm

Base Station Measurements

To inform the public and to confirm the validity of the calculated predictions provided in the ARPANSA Environmental EME Report of exposure levels around mobile phone prepared by the industry, ARPANSA has continued its measurements of a small sample of mobile phone base stations with detailed results from a total, now, of 23 base stations being published on the ARPANSA web site. Results show that the calculated predictions used in the EME reports overestimate the maximum exposure by a small factor. They also show the wide variation that can be found even within one metre of a given location. A small number of further measurements are planned for the coming year, including mobile phone base stations with newer technologies and computer network base stations. The survey results are available at

<http://www.arpansa.gov.au/RadiationProtection/BaseStationSurvey/index.cfm>

ARPANSA Guidelines for ELF and Static Electric and Magnetic Fields

Since the decision to redraft the proposed Standard as Guidelines in 2011, significant work has been undertaken to harmonise the document with ICNIRP's 2010 Guidelines and ensure the language is in a non-regulatory style. The Guidelines will include a recommendation to assess the potential for reducing exposure to magnetic fields where this can be done in a cost-effective way. Publication of the Guidelines is expected in 2013.

EMR Health Complaints Register

ARPANSA commenced Australia's first centralised Electromagnetic Radiation (EMR) Health Complaints Register in 2003. The Register collects reports of health concerns related to possible EMR field exposures in the range of 0-300 GHz. Members of the public who believe they have suffered ill-effects as a result of exposure to EMR can lodge a written complaint to the Register. The analysis of EMR Health Complaints Register Data for the period July 2010 - June 2012 is available at

<http://www.arpansa.gov.au/RadiationProtection/emr/index.cfm>.

Research – EMF and Health

The majority of Australian research into health effects of EMF/EMR/EME is funded through the National Health and Medical Research Council of Australia (NHMRC) from a levy on the telecommunications industry. In 2012 the NHMRC funded the Australian Centre for Electromagnetic Bioeffects Research to continue research in this area till 2017. More information on NHMRC funded research investigating the effects of EMF/EMR/EME and health is available from <http://www.nhmrc.gov.au/grants/outcomes-funding-rounds/nhmrc-funded-research-effects-electromagnetic-energy/nhmrc-grants-eme>

Ongoing research includes the Australian contributions to Mobi-Kids and INTEROCC, psychological outcomes of RF exposures, dosimetry studies and exposure assessments, thermal regulation, RF and EEG.

Policies, Legislation and Standards

Review of scientific literature on health effects of RF EMR

ARPANSA has convened a small expert working group to assess the RF health-related literature published since the preparation of the ARPANSA RF Standard, including the Interphone results, and to report on whether there are any significant changes to the science underpinning the ARPANSA RF standard ([Radiation Protection Series No 3, RPS 3](#)) and whether RPS3 continues to provide adequate protection. This report is in preparation.

ACIF (Communications Alliance) Industry Code of Practice

Australia has a revised industry code of practice on Mobile Base Station Deployment ([ACIF C564:2011](#)) that specifies requirements for consultation and other matters in regard to the installation or upgrading of mobile phone base stations. One of these requirements is the preparation of the ARPANSA Environmental EME Report that provides predictions of maximum levels of exposure in the vicinity of a proposed base station.

Conferences and Meetings

The **Bioelectromagnetics Society** held its annual conference in Brisbane from June 17 to June 22, 2012. More information is available from the conference website <http://www.bems2012.com.au/2012/>

Swinburne University of Technology held a public symposium, "Science and Wireless" in November 2012. More information on the symposium, including videos of the presentations and interviews with the presenters, is available at: <http://www.swinburne.edu.au/lss/bpsyc/science-wireless.html>

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