

**WHO International EMF Project**  
**13th International Advisory Committee meeting**  
***New Zealand country report 2008***

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**Policies and legislation on EMF exposure**

Work on mandating national policies and Standards on EMF exposure in environmental legislation has made good progress over the past year with the release of a National Policy Statement (NPS) on Electricity Transmission and the decision by Cabinet to publish National Environmental Standards (NES) for Telecommunications Facilities. These instruments are promulgated under the Resource Management Act (RMA).

**NPS on Electricity Transmission**

An NPS sets out objectives and policies on matters considered to be of national importance for local authorities to give effect to in local environmental planning rules. A draft NPS on Electricity Transmission was published in May 2007 and submissions on this draft were heard by a Board of Inquiry (headed by a former Environment Court judge) in August and September 2007. The final NPS was published in March 2008 and can be downloaded from the Ministry for the Environment (MfE) website\*.

Policy 9 of the final NPS requires that:

“Provisions dealing with electric and magnetic fields associated with the electricity transmission network must be based on the International Commission on Non-ionising Radiation Protection Guidelines for limiting exposure to time varying electric magnetic fields (up to 300 GHz) (Health Physics, 1998, 74(4): 494-522) and recommendations from the World Health Organisation monograph Environment Health Criteria (No 238, June 2007) or revisions thereof and any applicable New Zealand standards or national environmental standards.”

Other policies require that planning, development and upgrades of the transmission system minimise or reduce effects on (amongst other things) “sensitive activities” (defined as including schools, residential buildings and hospitals).

Guidelines for local authorities on how to implement the NPS are being prepared.

**NES on telecommunication facilities**

An NES is a regulation under the RMA which sets national rules on dealing with specific environmental effects. A discussion document containing draft NESs dealing with telecommunications infrastructure was published in June 2007. One of the NESs covered exposures to RF fields. Following analysis of submissions on the draft NES, Cabinet agreed<sup>†</sup> to go ahead with an NES which requires compliance with New Zealand Standard 2772.1:1999 *Radiofrequency Fields Part 1: - Maximum exposure levels 3 kHz*

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\*<http://www.mfe.govt.nz/publications/rma/nps-electricity-transmission-mar08/nps-electricity-transmission-mar08.pdf>

<sup>†</sup> See <http://www.mfe.govt.nz/laws/standards/telecommunications-cabinet-paper.html>

- 300 GHz (which is based on the 1998 ICNIRP Guidelines), with measurements to confirm compliance if exposures are anticipated to exceed 25% of the applicable reference level. The final version of the NES is now being drafted.

### **Radiation Protection Act**

A new Radiation Protection Act is currently being drafted, but will not now include provisions to regulate NIR sources.

### **Public concerns**

A Board of Inquiry into a proposed new 400 kV transmission line is now in progress. Many submissions have expressed concern about possible health effects of EMFs from the line. Submissions and evidence are available on the MfE web site\*.

### **Research activities**

The New Zealand part of the Interphone study has been completed and the results submitted for publication. The original Interphone researchers (Professor Alistair Woodward, now at the Auckland School of Population Health, and Angus Cook, now at the University of Western Australia) are now working with staff from the Massey University Centre for Public Health Research in the IARC extension of this work to look at occupational exposures to EMFs and possible relationships to tumours of the brain and nervous system.

A small group in the Electrical Engineering Department at Auckland University has investigated modelling multipath exposures, dosimetry and possible biomedical applications of EMF.

The *Interagency Committee on the Health Effects of Non-Ionising Fields* held two further meetings during the year to provide the New Zealand Director General of Health with scientific and technical advice on any potential health effects from exposures to ELF and RF fields. The results from recent research considered by the Committee have not given cause for concern and no change to existing recommendations has been considered necessary.

### **Public information activities**

A lengthy and long overdue revision of the Ministry of Health publication *Electric and Magnetic Fields and Your Health* has finally been completed. The revised version is now being prepared for printing. While the conclusions have not changed since the last revision, the opportunity has been taken to incorporate the findings and recommendations of EHC 238 and other recent significant reviews.

A separate (shorter) information sheet on how individuals can reduce exposures is also planned.

***New Zealand National Radiation Laboratory/Ministry of Health***

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\* <http://www.mfe.govt.nz/rma/call-in-transpower/board-of-inquiry/index.html>