

Birgit Richards

Standing Committee on Infrastructure and Communications

House of Representatives

PO Box 6021

Parliament House

Canberra ACT 2600



RE: Submission in support of the Telecommunications Amendment (Enhancing Community Consultation) Bill 2011

Dear Sir/madam,

In the light of the wealth of indications and evidence for damage from seven decades of international high frequency research, it has to be asked just how much chronic illness, genotoxicity and environmental damage needs to be documented in order to unsettle the selective perception of today's governments.

From the WHO down to the consumer and environmental protection at regional level, there is a overwhelming amount of evidence and indications showing the extent to which the profit interests of large corporations hinder the development of effective protection measures. In the case of mobile communications technologies for example, the high proportion of industry financed research has a corresponding influence on the risk assessment of the products. The industry has even secured a right to participate in the funding allocation for research which is financed entirely by the state (according to PROF. R. FRENTZEL-BEYME in public statements). Independent researchers like PROF. P. SEMM, PROF. F. ADLKOFER, PROF. G. HYLAND, DR. L. VON KLITZING und DR. G. CARLO lose their research funds, when they point to severe health damage. The state is implicated in the business of the industry, when its legal obligation would be to create transparency and control its dealings.

Source: <http://www.kompetenzinitiative.net/britannien/competence-initiative/index.html>

The discussion around high frequency radiation and the associated health problems has escalated around the world, where scientific research is being ignored, misconstrued or ridiculed by large companies with interests in the profits made from wireless communications technologies and none more than mobile phone communications.

The escape from exposure has now virtually become impossible in the Western world, and while networks are extended, more towers are constructed, panels added, the health of millions of people is at stake.

From research in the 1950's by the Russians, who very successfully used microwave radiation during the cold war against the Americans, all the way through to the Interphone Study, initiated by the IARC, signs are clear and loud, that the effects of High Frequency Radiation cannot be dismissed as harmless and safe.

The WHO recommends as follows:

The precautionary principle provides justification for public policy actions in situations of scientific complexity, uncertainty and ignorance, where there may be a need to avoid, or reduce, potentially serious or irreversible threats to health and the environment, using an appropriate strength of scientific evidence, and taking into account the pros and cons of action and inaction.

Current regulations in Australia permit levels of radiation which by far exceed where biological effects are seen in studies worldwide. To randomly place mobile phone towers within the community, in sensitive locations, such as near schools, childcare centres, homes for the aged, hospitals without regard for intensities is irresponsible and without care and consideration for especially the future generation of young, developing people of this country.

Transparency and education for possible risks associated with Microwave Radiation is important, and giving residents choices and a voice in what may dramatically impact on their health. In the Universal Declaration of Human Rights , Article 25, it is stated that:

- *(1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.*

Health risks associated with phone towers are outlined in the following studies:

Wolf R, Wolf D, (April 2004) *Increased incidence of cancer near a cell-phone transmitter station*, International Journal of Cancer Prevention, 1(2) April 2004

Eger H et al, (November 2004) *The Influence of Being Physically Near to a Cell Phone Transmission Mast on the Incidence of Cancer*, Umwelt Medizin Gesellschaft 17,4 2004

Augner C et al, (September 2008) *GSM base stations: Short-term effects on well-being*, Bioelectromagnetics. 2008 Sep 19. [Epub ahead of print]

Preece AW et al, (June 2007) *Health response of two communities to military antennae in Cyprus*, Occup Environ Med. 2007 Jun;64(6):402-8

Abdel-Rassoul G et al, (March 2007) *Neurobehavioral effects among inhabitants around mobile phone base stations*, Neurotoxicology. 2007 Mar;28(2):434-40

Yurekli A et al, (2006) *GSM base station electromagnetic radiation and oxidative stress in rats*, Electromagn Biol Med 25(3):177-88

Bortkiewicz A et al, (2004) *Subjective symptoms reported by people living in the vicinity of cellular phone base stations: review*, Med Pr. 2004;55(4):345-51

Nikolova T et al, (October 2005) *Electromagnetic fields affect transcript levels of apoptosis-related genes in embryonic stem cell-derived neural progenitor cells*, FASEB J. 2005 Oct;19(12):1686-8

Santini R et al, (September 2003) *Symptoms experienced by people in vicinity of base stations: II/ Incidences of age, duration of exposure, location of subjects in relation to the antennas and other electromagnetic factors*, Pathol Biol (Paris). 2003 Sep;51(7):412-5

Navarro EA et al, (December 2003) *The Microwave Syndrome: A Preliminary Study in Spain*, Electromagn Biol Med 22(2-3): 161-169

Santini R et al, (July 2002) *Investigation on the health of people living near mobile telephone relay stations: I/Incidence according to distance and sex*, Pathol Biol (Paris) 2002 Jul;50(6):369-73

REFLEX Report - Risk Evaluation of Potential Environmental Hazards From Low Frequency Electromagnetic Field Exposure Using Sensitive *in vitro* Methods. A project funded by the European Union under the programme "**Quality of Life and Management of Living Resources**"

In addition to the proposed amendments to the Telecommunications Act 1997 it is therefore crucial to look at exposure guidelines with a more critical approach and a move away from the antiquated view of non-existence of biological effects below tissue heating. The standards followed were set by the ICNIRP, while much of the data used in ICNIRP was only relevant to short term, acute exposure studies on animals and as such, only considered thermal effects, not long term, low level, chronic effects which many scientists and researchers worldwide are concerned with. While the ARPANSA measures emissions from mobile phone stations and is satisfied with those remaining below the exposure limits set in 2002 (Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields - 3 kHz to 300 GHz), hereby disregarding nine entire years of research. Standards set claim to protect:

"They are designed to protect all members of the public including those sometimes thought to be particularly vulnerable (the elderly, the infirm, pregnant women and children)."

The ARPANSA also states:

*There is no clear evidence in the existing scientific literature that living near a mobile phone base station or using a mobile phone causes adverse health effects. **However the possibility of harm cannot be ruled out.** (Fact Sheet EME Series 2)*

The **Salzburg Resolution** was signed by 20 scientists and researchers from around the world and the following critical aspects were defined:

1. It is recommended that development rights for the erection and for operation of a base station should be subject to a permission procedure. The protocol should include the following aspects:
 - Information ahead and active involvement of the local public
 - Inspection of alternative locations for the siting
 - Protection of health and wellbeing
 - Considerations on conservation of land- and townscape
 - Computation and measurement of exposure
 - Considerations on existing sources of HF-EMF exposure
 - Inspection and monitoring after installation.
2. It is recommended that a national database be set up on a governmental level giving details of all base stations and their emissions.
3. It is recommended for existing and new base stations to exploit all technical possibilities to ensure exposure is as low as achievable (ALATA-principle) and that new base stations are planned to guarantee that the exposure at places where people spend longer periods of time is as low as possible, but within the strict public health guidelines.
4. Presently the assessment of biological effects of exposures from base stations in the low-dose range is difficult but indispensable for protection of public health. There is at present evidence of no threshold for adverse health effects.

Recommendations of specific exposure limits are prone to considerable uncertainties and should be considered preliminary. For the total of all high-frequency irradiation a limit value of 100 mW/m² (10 µW/cm²) is recommended.

For preventive public health protection a preliminary guideline level for the sum total of exposures from all ELF pulse modulated high-frequency facilities such as GSM base stations of 1 mW/m² (0.1 µW/cm²) is recommended.

(International Conference on Cell Tower Siting, "Linking Science & Public Health", Salzburg, June 7-8, 2000, www.land-sbg.gv.at/celltower)

It would therefore be visionary, intelligent and responsible to learn from overseas research, experience and pay attention to the numerous scientist across the globe and their call for a precautionary approach to the siting, number, exposure limits and proliferation of mobile phone towers.

With warm regards

Birgit Richards
Building Biologist and concerned member of the public