



Dear colleagues,

Enclosed (PhD)<sup>1</sup> thesis of Don Maisch is worth reading. He became Doctor of Philosophy at the University of Wollongong, on June 12, 2010.

## **The Procrustean Approach**

### **Setting Exposure Standards for Telecommunications Frequency Electromagnetic Radiation**

#### **Abstract**

Since the 1950s there has been an ongoing controversy regarding the possibility of health hazards from exposure to non-ionizing radiation emissions from radiofrequency and microwave (RF/MW) technology: from military radar to telecommunications. In response to these concerns, and with support from the World Health Organization's International EMF Project (IEMFP) human exposure limits have been developed by the Institute of Electrical and Electronics Engineers (IEEE) and the International Commission on Non-Ionizing Radiation protection (ICNIRP). These limits, although differing in detail, are founded on the same scientific literature base and deem that the primary hazard to be considered in setting human exposure limits is thermal. This is defined as an excessive and harmful rise in body temperature as a consequence of exposure to high-level RF/MW emissions. This viewpoint has come to dominate the debate at an international level and is justified by these organizations as a product of expert risk assessments of peer reviewed data. The thesis challenges the validity of this viewpoint by critiquing regulatory risk assessment and the peer review and advisory processes that have shaped RF/MW regulation. It will be shown that these processes have been prone to political manipulation and conflicts of interests leading to various scientific perspectives being marginalised with reluctance on the part of regulators to make decisions that might inconvenience industry interests. To substantiate these claims the thesis provides an assessment of the development of the American RF/MW standard from the 1950's and its later revisions under the IEEE, the ongoing development of guidelines and standards by ICNIRP and IEGM and RF/MW standard development in Australia. The thesis concludes with the argument that, given the sheer number of people exposed to RF/MW from telecommunications devices, there is an urgent need to reform the standard setting process and to conduct an international re-assessment of the biological limits placed on current RF/MW standards.

#### **[Read the thesis](#)**

#### ***More information:***

*Alex Swinkels*

*Phone: +31-181-785587*

*E-mail: [info@iemfa.org](mailto:info@iemfa.org)*

*<http://www.iemfa.org>*

*Don Maisch*

*Phone: +61-362430195*

*E-mail: [web@emfacts.co](mailto:web@emfacts.co)*

*<http://www.emfacts.com>*

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<sup>1</sup> The cover and first page were not part of the submitted thesis.