# SOUTH AFRICA
## NATIONAL REPORT 2005

**General research activities related to EMF health:**

*On-going studies:*

A pilot study is currently being conducted as a collaborative effort between the Tshwane University of Technology, University of Pretoria Medical School and the Finnish Radiation Protection Institute (STUK). The aim of the study is to identify parameters whereby the effects of low level microwave radiation (900 & 1800 MHz) on human sperm can be detected. The association between the expression of heat shock proteins, especially HSP27 and HSP70, and variations in sperm motility is currently being investigated. Papers on this topic were delivered at the BEMS 2005 meeting in Dublin, Ireland.

**New policies and legislation:**

The process implemented in 2003 under the Hazardous Substances Act to control the non-medical application of electromagnetic fields was suspended on 18 November 2003 by the Director General of the South African Department of Health, following objections by the industry to certain areas of ambiguity in the current regulations pertaining to the afore-mentioned legislation. The Director General therefore requested that a thorough analysis of the available internationally recognised guidelines for human exposure to electromagnetic fields be conducted. A systematic investigation of the regulatory control of electromagnetic fields internationally has since then been conducted and a first draft of the proposed new regulations with regard to this matter could hopefully be put forward at the beginning of 2006. The model legislation proposed at the 2005 IAC meeting will be used as the basis for compiling new regulations, as well recent national legislation implemented in countries such as Israel and Australia, and the 2004 EC Directive for occupational exposure to electromagnetic fields.

A working group of the South African Bureau of Standards Technical Committee 73 was established to consider the development and adoption of standards relating to the measurement and calculation of human exposure to time-varying electromagnetic fields. The standards developed by the IEC TC106 will most probably form the bulk of the standards adopted, but standards developed by organizations such as ETSI and ICES will definitely also be considered (if only as background information).

**Areas of public concern and national responses:**

Exposure to base stations remains a general public concern. Queries from members of the public and community groups are handled on an individual basis and people are, as a rule, referred to the website of the International EMF Project as the primary source of information in this regard.

Several large metropolitan areas in South Africa (where the highest concentrations of cellular masts typically exist) have based the health aspect of their telecommunications infrastructure policies on the ICNIRP guidelines. Unfortunately, the current impasse with regard to the application of legislation by the Department of Health to control non-medical RF is not helpful at all when local authorities have to deal with queries about their respective policies. However, the 1999 EUROBROCHURE on electromagnetic fields, as well as the newly proposed EUROBROCHURE on base stations, would definitely go a long way to alleviating the current legislative vacuum.

**New public information activities:**

None, mainly due to the decision by the Department of Health to suspend the licensing of non-medical RF installations, pending a full investigation of all aspects of this matter.