# SOUTH AFRICA
## NATIONAL REPORT 2013

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

Not aware of any current research activity involving electromagnetic fields.

**New policies and legislation:**

Still waiting for the WHO health risk assessment for radiofrequency fields to be published. Once this is available, the process will continue to compile updated legislation (i.e. enabling act and associated regulations) in order to regulate human exposure to non-ionizing electromagnetic fields. The WHO model legislation will most probably be used as the framework for this purpose.

Have taken note of the publication of a Report & Order by the US Federal Communications Commission (FCC) in which they clarified evaluation procedures and references to determine compliance with their exposure limits, including specific absorption rate (SAR) as a primary metric for compliance, consideration of the pinna (outer ear) as an extremity, and measurement of medical implant exposure. The FCC also published a Further Notice for Proposed Rulemaking that included proposals to provide more efficient, practical, and consistent application of evaluation procedures to ensure compliance with their guidelines limiting human exposure to RF electromagnetic fields. They are proposing to broadly revise and harmonize the criteria for determining whether single or multiple fixed, mobile, or portable RF sources would be subject to routine evaluation for compliance with the RF exposure limits or would be exempted from such evaluations. Additionally, they propose clarifications of evaluation requirements for portable and medical implant devices. They also propose to adopt specific new requirements for signs and barriers at fixed transmitter sites to ensure compliance with public and occupational exposure limits. Furthermore, they propose a clarification of the definition of transient exposure for non-workers exposed at levels up to occupational limits.

The above-mentioned FCC documents (and any future documents of theirs produced in the process) will be studied closely because they do provide very practical guidance on how compliance with exposure limits can be evaluated, as well as highlighting possible instances where installations could be exempted, given the fact that in those instances public exposure to the electromagnetic fields of such an installation would never exceed the applicable limit.

A working group of the South African Bureau of Standards Technical Committee 73 was established to consider the development and adoption of standards related to the measurement and calculation of human exposure to time-varying electromagnetic fields. The standards developed in this regard by IEC TC106 and CENELEC TC106X can be adopted and overwritten as South African national standards, as and when appropriate.

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

Exposure to base stations remains a definite concern of the general public. 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, because this is also the Department of Health's primary source of information and guidance with regard to the health effects of EMF.

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, following explicit recommendations by the Department of Health in this regard. Unfortunately, the current lack of comprehensive national regulations to

effectively control public and occupational exposure non-medical EMF is not helpful at all for local authorities that have to deal with queries about their respective policies.

**New public information activities:**

The largest cellular network provider in South Africa has opted to contract an independent company over the past few years to establish a database of all its base stations around South Africa, although this has never been a regulatory requirement. Surveys of base stations, involving spot and/or continuous measurements, have been carried out to obtain information on field strength values and how these values compare to ICNIRP guidelines. At this point in time, the data for more than 6000 base stations are available.