

Republic of Slovenia

13th International Advisory Committee Meeting on EMF
June 2008

Report on EMF Activities Dr. Peter Gajšek

1. General Research activities in Slovenia related to EMF health

Institute of Nonionizing Radiation is currently involved in 3 national and 2 international research project in the field of EMF. The main directions of the research are experimental and numerical EMF dosimetry including the measurement campaign with emphasis on base stations and transformers. Occupational exposure assessment – particularly from TETRA systems - is one of the main research focus. More details on research project can be found on the web page www.inis.si

University of Ljubljana, Faculty of EE is involved in 4 international and 4 national research programs and projects in the field of biomedical engineering. The main directions of investigation are cell membrane electroporation with its applications in ECT and EGT, electrical stimulation of chronic wound healing and non-invasive measurements of tissue perfusion and oxygenation. More details on research project can be found on the web page lbfk.fe.uni-lj.si.

2. New policies and legislation:

No new policy or legislation for the protection of health from electromagnetic fields has been created. The implementation of the new Decree on occupational EMF exposure has been postponed until the 2012.

3. Areas of public concern and national responses

The widespread of wireless communication technologies in Slovenia has raised public concern in the last few years, regarding the likelihood of potential health effects of EMF exposure, namely from the use of mobile phones, the installation of base stations and other wireless networks and of electromagnetic interference with medical devices. Nevertheless, by the end of 2007 the mobile phone penetration rate in Slovenia had reached 98%, which was higher than the average within the EU. The siting of power lines has also given rise to fear among the public. Concerns over the use of mobile phones are increasing while base stations are still of public interest.

The evaluation of EMF in environment is under the auspices of Ministry of Environment (Decree on EMF), whose aim is to efficiently respond to requests for on-site assessment of electromagnetic fields intensity levels. During 2007, the Ministry of Environment has funded the nation-wide project to create a EMF source database and over 10.000 selective measurements over RF spectrum. The levels of EMF measured collected so far are well below the ICNIRP standards. The results could be reached on line (http://gis.arso.gov.si/atlasokolja/profile.aspx?id=Atlas_Okolja_AXL@Arso)

Such a database offers a good background for preparing a mapping of the field patterns around EMF sources in real 3D environments.

4. New public information activities

The national coordination action – **project FORUM EMF** plays a major role in the risk communication process, regarding EMF exposure and health. Because of the need to improve risk communication, different documents and activities are being prepared through 2007/08, in order to provide better information to the public the include the editing of scientific literature for the general public, the production and distribution of information material, the initiation of symposia, expert hearings and information events. The information provided includes also the results from systematic measurement campaigns carried out by the project team near the base station antennas of GSM and UMTS and other EMF sources including power lines and transformers in public areas chosen all over Slovenia (www.forum-ems.si).

A scientific advisory board on EMF and health within the project Forum EMS has reviewed the scientific literature concerning EMF and possible health effects. The experts concluded in a consensus meeting that the research performed to date gives no indication for hazardous health effects from electromagnetic emissions of mobile communication below the limits recommended by the ICNIRP www.forum-ems.si

One of the well accepted activities by public and media during 2007 was the »rent a dosimeter« campaign where citizens could rent a measuring instruments for free to measure his/her own exposure to EMF. The results to date show that the mobile phone represents more than 60% of the total EMF exposure of the individual whereas the base station represents only 20% of the total EMF exposure.

The Forum EMS is also carried out short educating video dedicated to mobile communications and health effects about scientific evidence and risk management on environmental health. This video will provide information to the public and the health services about different areas of concerns, which are expected to be concluded in the next months.