

Austria

Report on EMF Activities

10th International Advisory Committee on EMF

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*Federal Ministry of Agriculture, Forestry, Environment and Water Management
Dept. Radiation Protection
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1. GENERAL RESEARCH ACTIVITIES:

- ***Research Activities of ARC Seibersdorf in the field of EMF (G. Neubauer):***

The business unit Mobile Communications Safety of ARC Seibersdorf research runs an EMC Test Laboratory which is accredited by the Austrian Ministry of Economic Affairs. Staff members of the Information Technologies Division have been engaging in EMF-related research for 20 years. The research projects range from literature evaluations regarding the biological effects of electromagnetic fields, conducted for the Austrian government as well as for industry and utility companies, to measurements of SAR due to mobile phones in human tissue. The ARCS participates in the PERFORM-A project funded by the EU, as an assistant partner involved in dosimetry. The project focuses at the investigation of EMF carcinogenicity. Seibersdorf research is currently leading the EUREKA project BASEXPO dedicated to the development of procedures for assessing human exposure to electromagnetic radiation of base stations together with 7 international partners and an international study on the feasibility of future epidemiological studies on health effects of mobile telephone base stations also with 7 international partners from the field of dosimetry and epidemiology. Other ongoing projects performed in close co-operation with partners from medicine and biology focus on e.g. in vitro immunological tests, human brain functions or DNA integrity.

- ***Research activities at the Institute of Clinical Engineering at the University of Technology, Graz (N. Leitgeb):***

The Institute of Clinical Engineering participates in several European Network activities such as heading COST Action 281. In addition it participates in leading committees in EMF-NET and EIS-EMF and plays an active role in radiation protection such as heading the committee of non-ionising radiation protection of the German commission of radiation protection. Its research activities concentrate on the following projects.

(a) Project EPROS (Electrosensitives and protected sleep): Field study of sleep disorders associated with telecommunication base stations, using a double blind crossover design to quantitatively assess sleep impairment at different RF-EMF- protected exposure conditions (Prof. Norbert Leitgeb, TU Graz) <http://www.kht.tugraz.at/home.swf>.

(b) Project CHIEF (Children's Exposure to Electromagnetic Fields): Physiologic and dosimetric assessment of specific aspects of children in relation to exposures to electric and magnetic fields.

(c) Project electromagnetic hypersensitivity: Quantitative assessment of electromagnetic hypersensitivity in relation to normal reactions and its relation to the development of non-specific health symptoms.

(d) Project EXIMA (Exposures to inhomogeneous electric and magnetic fields): Dosimetric assessment of exposures to inhomogeneous electric and magnetic field sources in relation to existing EMF limits for whole body exposure. Numerical simulation of inhomogeneous exposure conditions and verification by measurement.

(e) Project EBEG: Collection, measurement and assessment of EMF emission data of relevant electrical appliances and development of dosimetric and metrological approaches applicable for practical use to check for compliance of inhomogeneous fields with existing homogenous-field- based exposure limits.

(f) Project EMIS, calculation of intracorporal current densities from electric and magnetic fields from power lines.

2. NEW POLICIES AND LEGISLATIONS REGARDING EMF EXPOSURE:

Until now no specific law for the protection of health from electromagnetic fields has been created in Austria. Exposure limits for low- and high frequency electromagnetic fields are established in the ÖNORM S1119 for the low frequency range and the ÖNORM S1120 for the high frequency range issued by the Austrian Standards Institute. A revision of these documents is ongoing and a new unified ÖNORM (ÖVE/ÖNORM 8850) for the whole frequency range can be expected to be issued by the end of 2005. The exposure limits will be harmonised with the values proposed by the ICNIRP. An ÖNORM is not legally binding, but defines the state of the art and experts use them in administrative proceedings and they can be imposed by official notifications.

3. AREAS OF PUBLIC CONCERN AND NATIONAL RESPONSES:

In Austria there are concerns over possible health effects of electromagnetic fields related to base stations and the construction of new power lines. Concerns over the use of mobile phones are quite rare.

- ***“Wissenschaftlicher Beirat Funk”, WBF***

A scientific advisory board on electromagnetic exposure and health (*Wissenschaftlicher Beirat Funk, WBF*) has been installed by the Federal Ministry for Transport, Innovation and Technology, headed by N. Vana (University of Technology, Vienna). The members of the board had to review the scientific literature concerning RF and possible health effects (nervous system, tumour induction and subjective symptoms). 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 WHO and ICNIRP <http://www.wbf.or.at/>.

- ***Review of the scientific literature dealing with the effects of ELF-EMF***

Since the early eighties the department of radiation protection has ordered studies about the different applications which generate non ionizing radiation and the arising exposures in Austria. Furthermore the studies reviewed and evaluated the scientific publications dealing with EMF and health. Very recently a new review of the scientific literature about the effects of ELF-EMF by the ARCS has been financed by the BMLFUW, the BMWA and the Industry (VEÖ, FEEI). The results of the study will be summarized and published in a booklet for the general public.

4. NEW PUBLIC INFORMATION ACTIVITIES:

- ***Forum Mobilkommunikation (FMK)***

The most active organisation in Austria with respect to risk communication is the “FMK” (Forum Mobilkommunikation), which is an umbrella organisation founded by the Austrian network providers, mobile phone manufacturers and the Association of the Austrian Electrical and Electronics Industries (FEEI). The FMK sees its role as a mediator between the Industry and public interests. Activities of the FMK 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 (<http://www.fmk.at>).