#### **National Report: Hungary**

International EMF Project, 11<sup>th</sup> International Advisory Committee meeting 2008 June 19-20, Berlin

# 1) General research activities related to EMF and health

There is no running National EMF Project in Hungary. The volume of the governmental support for EMF research is limited. There are some projects supported by the government and institutions:

- Personal RF dosimetry. Development of methodological and best practice using the personal RF dosimeter. Preliminary survey study has been performed and further studies are on-going.
- Participation and initiate the international TRANSEXPO project: Study of Childhood Leukaemia and Residences Adjacent to Transformer Stations. (National Research Institute for Radiobiology and Radiohygiene (NRIRR) with collaboration the Medical Univ. of Budapest)
- Genotoxic studies on EMF: Evaluation of DNA damage by alkaline Comet-assay in-vitro on human lymphocytes exposure to RF 900/1800 MHz GSM-like electromagnetic field, or static gradient magnetic field (NRIRR).
- ELF-EMF exposure survey of residential transformer stations and solution for mitigation (NRIRR)
- Participation in the EMF-NEAR "Exposure at UMTS electromagnetic fields: Study on potential adverse effects on hearing" EU project (NIRR, supported by EU, DG SANCO).

# 2) New policies and legislations regarding to EMF exposure

2.1 No new legislation released in the last year .

(Note: The *Ministry of Health, Social and Family Affairs* released a new ordinance on the public limits of EMF exposure between 0 Hz- to 300 GHz in 2004. The number of ordinance: 63/2004 (VII.26) ESzCsM Ordinance. The Ordinance is mandatory and was published in 26.07.2004, put in force 04.08.2004. The Ordinance fully adopted the 1999/519/EC recommendations. The limits are the same as the 1999/519/EC recommendations (basic limits, and reference levels). The years passed with the new regulation without any problems with the public. Note that the old regulation was stricter than the current EU limits in the frequency range of RF and microwave.

# 2.2 Planned initiatives:

Since 40/2004 EU Directive has been delayed by the EU, the limits for workers will be put in an ordinance later but before 2012. Draft version is under discussion. Until the limits of 40/2004 Directive and/or ICNIRP Guidelines are to be applied.

# 3. Areas of public concern and national responses

The public concern is continuously permanent on the same level approximately for many years. The main issue is the mobile base stations.

The second topic of the public concerns is the electric power transformers. In Hungary the 10/04kV transformer stations are typically installed in the basement or ground floor of multistorey apartment buildings. Magnetic fields up to several tens of  $\mu T$  have been measured in apartments or offices located close to transformers. Residents are concerned about the possible health effects of magnetic fields

# 4) New public information activities

- 4.1 The National Research Institute for Radiobiology and Radiohygiene (NRIRR) is in active on the EMF survey measurements in the environment and living areas. The places were any survey or expert report have been released are on the Internet website of the institute (www.osski.hu).
- 4.2 An EMF portal is operated by the mobile operators for the public (<a href="www.emf-portal.hu">www.emf-portal.hu</a>) including the most important information about the RF radiation and health.

Many information have been released last year about the EMF and health toward the electronic and written media.

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