

## **National Report: Hungary 2014**

International EMF Project, 20<sup>th</sup> International Advisory Committee meeting  
2015. May 4-5, Geneva

### **1) General research activities related to EMF and health**

- Evaluation of micronucleus (MN) and DNA damage by alkaline comet-assay in vitro of human lymphocytes exposure to intermediate frequency (IF) magnetic fields (*NRIRR*).
- In vitro study on possible mechanisms of adaptive response (AR) induced by RF (*NRIRR*).
- Human cognitive and EEG studies on WiFi exposure and co-exposure to RF and caffeine (*University of Pécs, NRIRR*).
- Survey of Public RF exposure around radio and television broadcast stations (*NRIRR and National Media and Infocommunications Authority-NMHH*)
- Measurement campaign and survey of public exposure to RF from mobile phone base stations in schools and kindergartens in Hungary (more than 300 sites). Data of measurements are available for the public on the webpage (*National Media and Infocommunications Authority, NMHH*)
- ELF-MF public exposure survey in the vicinity of transformer stations (*NRIRR*)
- Participation in the international TRANSEXPO project: Study of Childhood Leukaemia and Residences Adjacent to Transformer Stations. (*NRIRR, Medical Univ. of Budapest*)
- Joint to the COST BM1309 “European network for innovative uses of EMFs in medical applications” project (*NRIRR, University of Pécs*)

### **2) New policies and legislations regarding to EMF exposure**

2.1 No new legislation released in the last year.

2.2 Planned initiatives:

The process to put into national legislation of 2013/35/EU Directives have not yet been started. The ICNIRP Guidelines and EU Directives are applied in practice for evaluation the occupational exposure to EMF.

### **3. Areas of public concern and national responses**

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

3.2 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 multi-storey apartment buildings. Magnetic fields up to several tens of  $\mu\text{T}$  have been measured in apartments or offices located close to transformers. Residents are concerned about the possible health effects of magnetic fields

3.3 Spreading in the market the new devices (beds, mattress, pillow etc.) for PMF magnetic therapy distributed by SMEs with very low level scientific justification of therapeutic effects.

#### **4) New public information activities**

4.1 The *National Research Institute for Radiobiology and Radiohygiene* (NRIRR) publishes some information about the EMF, UV exposure and human health ([www.osski.hu](http://www.osski.hu)).

4.2 Information available for the public about the EMF exposure to RF at the homepage of the *National Media and Infocommunications Authority*  
(<http://emirpub-prod.nmhh.hu/pubrendszer-web/eszmog/eszmogMeresek.jhtml>)

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