

**Bulgarian National Program Committee (BNPC)**  
Report to IAC - 2008

## **I General research activities in Bulgaria related to EMF health**

### A. Ongoing projects

#### **1. National Environmental and Health Action Plan (NEHAP)**

**Funds:** Ministry of Health. This is multiyear project that includes Non-ionizing radiation. The activities concerning the NEHAP for 2007 in the field of NIR cover the following topics:

a) **a database of sources of mobile communication:** consists of sources of EMF such as GSM, UMTS, WIMAX and other antennas with their technical characteristics, maps, situation, safety zones, data of measurements of EMF, etc.

b) **implementation of the national system for risk communication and risk management in the field of EMR exposure:** continuing activities for several years. See III.

In addition, activities concerning the new National Environmental and Health Action Plan for children started.

#### **2. Development of a method for control and examination of the safety factors of different UV filters in cosmetic products**

**Funds:** Ministry of Health. We develop a physical laboratory method for examination of the transmission of UV radiation and safety factor of different cosmetic products (creams) for UV-A and UV-B radiation. The results will contribute to improving the control of cosmetic products and for compliance of the cosmetic products with the requirements for safety and provision of real protection.

### B. Ph. D. theses

***Mobile communication. Dosimetry, exposure and risk assessment.*** Finished on 14 June 2007. T. Shalamanova, Ph.D. medical physicist, a member of the Bulgarian National Program Committee.

***Exposure and risk assessment of UV radiation in the working environment.*** In progress. M. Ivanova, res. ass., a member of the Bulgarian National Program Committee.

## **II New Policies and Legislation regarding EMF exposure**

1. ***Council Recommendation of the Limitation of Exposure to the General Population EC/1999/519*** is in a final stage of the process of implementing in Bulgaria. Now, at the same time of the IAC meeting (13-14 June), a discussion on the problems of this Recommendation is going on in Brussels. Two persons of our Bulgarian National Program Committee attended

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these discussions. We are still waiting for the decision of the Ministry of Health to implement the Ordinance for limiting exposure of EMF on general population. There we proposed exposure limits that are different for various regions and places, where the population may stay depending on exposure time. We proposed a regime for permission of stationary sources of radiation, as well.

2. *Directive 2004(40)EC of the European Parliament* was in discussion for implementing in Bulgaria as an *Ordinance for limiting the EMF exposure on workers* before stopping its implementation by the European Union.

### III Areas of Public Concern and national responses

Three GSM operators work in Bulgaria (the fourth old analogue one is in a final stage of working). The new mobile technologies as UMTS (3G), WI-MAX are in development since 2006. More than 6 millions of people use cellular phones (about 80% of the population).

More and more people are afraid of EMF exposure, and most of them want measurements and corrections of the places where the antennas have been mounted. There are some people that are going to the court to move away the source of radiation close to their home. Many times, they connect their own health problems with the EMF exposure, sometimes they don't want to watch any antenna because of disturbing the landscape. In other cases, the public perception of the risk is no very adequate, and some individual communication to people is the only possibility to change their strange minds. This communication is more effective when it is made together with the specialists and operator in the stage before mounting the base station.

The same direction as in the previous report of the public concern is that some people want to have on their house/building base station because of the cost benefits, and avoiding direct exposure. Meanwhile, there are more cases on the court than those in 2006 connected with demands for removing base stations, power lines or military sources of radiation in the close proximity of living areas.

The Bulgarian National Program Committee on NIR had the following activities in the field of public relations and risk communication, as follows:

1. The WHO brochure *Establishing a dialogue on risks from electromagnetic fields* translated in Bulgarian language is disseminated among stakeholders: specialists, health inspections, etc.
2. Regional meetings with the general population concerning the risk of EMF human exposure have been organized several times:
  - in “critical” or “sensitive” regions;
  - initiatives of public committees;
  - workshops of the Bulgarian National Program Committee on EMF.

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### IV New public information activities

1. Training courses in the field of EMF sources, health risk, legislation, measurements, risk communication, implementation of the precautionary principle have been conducted to different groups of specialists from control laboratories, labour committees, particular professional groups.
2. Members of the Bulgarian National Program Committee participated on different international meetings presenting results of their work in the field of EMF. Publications in Proceedings are available for specialists on permanent posters, and in the library of the National Centre of Public Health Protection.
3. After the Mediterranean meeting in Crete, 2006, the international organizing committee decided the next two big meetings to be held in Palermo, 2008, and in Bulgaria, 2010. Before the Palermo meeting our BNPC organized an international meeting **Implementation of the Model Legislation (WHO) in the field of EMF human exposure: Quality assurance in measurements**, 14-17 October 2007, Balchik, Bulgaria.. Website: [www.faradayfoundation.org](http://www.faradayfoundation.org)

At the time of the meeting many tasks and activities have been discussed and followed:

- Model legislation in the field of EMF exposure and the possibility for implementing in countries of Central and East Europe
- Exposure limits and precautionary principle
- Press conference with the participation of the mobile communication companies
- Inter-laboratory measurements in two frequencies - 50 Hz and 2100 MHz
- Project FP7 and possibilities for the Balkan countries to apply
- Collaboration between the Central and East European countries in the field of EMF human exposure tasks.

As a conclusion we consider that the model legislation is eligible for our country and we will try to implement it in our future legislation.

4. Organization of the **Second International meeting SEE-ERA.NET Project, 6<sup>th</sup> EU Programme**. Participants from Bulgaria, Croatia, Slovenia, Sofia, “Kopitoto”, National park “Vitosha”. The program included the following topics:

- Discussion of the activities within SEE-ERA.NET Project
- Collaboration among countries in Balkans
- Planned meetings
- Strategy for monitoring of EMF in the concrete countries in West Balkans (4 countries)
- An attempt for project proposal for the FP7<sup>th</sup> - discussion. At the time of the meeting the participating countries discussed the possibility for applying for the FP7<sup>th</sup> EU program **Capacities – Horizontal programs** - Theme 6: Environment (including changes of the climate), **Regional knowledge, Regional potential**. Deadline: 14 March 2008
- Collaboration among countries in Balkans. Discussion on the possibility to be created an EMF association gather the specialists from the Central and East Europe, including the Balkan countries

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5. Organization of a **TRANSEXPO** meeting, 9-10 April 2008, Varna, Bulgaria. Participation from Bulgaria, Canada, Finland, Hungary, Israel, Turkey, USA. The Bulgarian group presented the following lectures:

- a pilot study of electric and magnetic fields emitted by transformers mounted in dwellings in Sofia (M. Israel, V. Zaryabova, M. Ivanova, T. Shalamanova)
- the Bulgarian national cancer registry (A. Manolova)