

**Bulgarian Expert Advisory Board (BEAB)**  
**International EMF Project**

**REPORT**

**20<sup>th</sup> International Advisory Committee Meeting**  
**WHO, Geneva, 4-6 May 2015**

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

**Ongoing projects**

**Project BG 07:** Programme “Public Health Initiatives”, Reference: *BG07-PAF – NFM& FM EEA: “Establishment of a system for regulation of the implementation and functioning of sites, sources of non-ionizing radiation (NIR), in compliance with the legislative requirements”*

**Funds:** the Norwegian Financial Mechanism and the Financial Mechanism of the European Economic Area 2009-2014

**Research team:** National Centre of Public Health and Analyses (NCPHA)

**Start:** September 2014

**Overall objective:** Improving public health through the development of healthcare information systems.

*Specific objectives (in the field of non-ionizing radiation only):*

The main objective of the part of the project concerning EMF exposure is to develop conditions to follow the European and to improve the national regulations concerning EMF exposure to the population; to ensure accurate information about the EMF levels in the environment for the competent state authorities and for the people by implementation of web-based electronic register.

The main activities are in the followings areas:

- national legislation concerning EMF exposure to general population;
- collecting data of on-site measurements
- Real time monitoring of EMF levels around communication sources.
- Electronic system for collecting information about the EMF levels in some regions with higher public concern or with higher density of sources of EMF radiation.

Improving the system of registration of sources of EMF radiation, levels of EMF exposure, wave pattern of irradiation in urban areas by providing electronic register and database with detailed information that can be used by national and regional authorities, also for future risk evaluation and risk managements activities for long time after finalizing the Project.

**Project:** *Analysis and evaluation of the public concern of EMF exposure from mobile base stations*

**Funds:** Medical University - Pleven

**Research team:** Medical University – Pleven, National Centre of Public Health and Analyses; research coordinator: Prof. M. Israel

**Duration:** 1 year, start in May 2014

Because of the short time duration of the project, and very small funds, the team will summarize their own measurements and activities concerning the implementation of the *National programme for risk communication and management*, to analyze the reasons and the dynamics of the public concern for 10 years. In addition, the team use a questionnaire on the

basis of the Eurobarometer 73.3. “Electromagnetic fields” circulated among students (about 200 numbers) for receiving information about their own fears concerning the use of mobile communication technology.

**Project No. DFNI-b01/0017/27.11.2012: “Measurement, assessment, analyses and prediction of EMF from mobile equipment in populated areas”**

**Funds:** The national research fund

**Research team:** New Bulgarian University, Sofia

The main objective of the study is to develop web based system for information about the EMF exposure to the general public; also to adapt models for simulation of different configurations of mobile equipment emission, with the aim to inform the people about EMF exposures.

The team finished the first stage of the study.

***National Environmental and Health Action Plan (NEHAP)***

**Funds:** State budget (Ministry of Health)

**Research team:** National Centre of Public Health and Analyses (NCPHA)

The project is completed at this stage, and now a discussion for new plan for the period up to 2020 is going on.

**Scientific publications:** In the reported period members of BEAB – the team of Prof. M. Israel (M. Ivanova, V. Zaryabova, T. Shalamanova, P. Ivanova, H. Petkova, V. Topalova) from the NCPHA, also L. Vesselinova (Military Medical Academy), L. Traikov (Medical University, Sofia), published their research studies in peer reviewed journals.

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

An important result of the activities of the Bulgarian National Programme Committee (BNPC) on NIR was the creating of the Bulgarian Expert Advisory Board (BEAB that is developed on the basis of the formal BNPC. The activities of this Board are closely related to the policy of the Ministry of Health, and it should be an Expert board for solving problems concerning the NIR exposure to general population.

***Council Recommendations 1999/519/EC and Directive 2013/35/EC***

Our BEAB is working for implementation of the changes in the Health Law developed in 2011, also of new Ordinance implementing rules for EMF exposure in the environment.

There is no any progress in the field of transposition of the Directive 2013/35/EC, only several training courses organized for the health inspectorates by the National Centre of Public Health and Analyses.

There are still not exposure limits for working areas for frequencies above 60 kHz (for electric field strength), and above 10 MHz (for magnetic field strength). Workers in occupations exposed to EMF above these frequencies are not protected since 2011, and it is very important the new EU Directive to be implemented next year.

At the same time, the national Bulgarian Accreditation Body doesn't give permission the control bodies that perform measurement to assess compliance according to the ICNIRP Guidelines that are the basis for the exposure limits in the Directive. This is big problem for providing a compliance of the EMF exposure in the working environment at national level because at this moment in Bulgaria there are not other regulations concerning occupational exposure of EMF in the frequency range above 60 kHz.

***EN 16489. Professional indoor sun exposure services - Part 1: Requirements for the provision of training, Part 2: Required qualification and competence of the indoor sun exposure consultant, Part 3: Requirements for the provision of services.***

The 3 parts of the standard are translated in Bulgarian language, and they are in a process of implementation. They will serve for training of the indoor solar consultants.

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

The tendency of the decreasing of public concern is still the same as in previous years. There are some individual complaints that are the same for several years, and also from the same persons. In our opinion, they are connected with their own health status or other reasons which are not as a result of EMF exposure.

The control by the Health authorities of implementation of base stations is strict, and the many problems concerning EMF exposure are solved at the stage of planning the location of the sources.

### **IV. New public information activities:**

1. Very important activity of our BEAB is *the holding of the 8<sup>th</sup> International EMF Workshop in Varna, 21-26 September 2014.*

All results concerning this meeting are available on the website of the meeting ([www.emf2014.emfbg.com](http://www.emf2014.emfbg.com)), also on the website of the NCPHA (<http://ncphp.government.bg/>)

Special issue of Bulgarian Journal of Public Health will be published very soon. A part of the papers are published in the peer review journal "Electromagnetic Biology and Medicine".

We are very grateful to all participants from IAC who attended the meeting, also to the international organizations that sent their representatives to participate, as WHO, European Commission, ICOH, IEEE, MMF Forum and others.

2. Training courses in the field of NIR sources, health risk, legislation, measurements, risk communication, implementation of the precautionary principle have been conducted to control laboratories, regional inspections.

3. Members of the Bulgarian Expert Advisory Board participated on different international meetings presenting results of their work in the field of NIR protection.

4. Annual meeting of the BEAB with representatives of mobile communication companies, health inspections, municipalities, Ministry of Health, NGOs, representatives of the general population.

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