

Bulgarian National Program Committee (BNPC)
International EMF Project

REPORT

18th International Advisory Committee Meeting
WHO, Paris, 6–7 June 2012

I. General research activities in Bulgaria related to EMF health

Ongoing project

National Environmental and Health Action Plan (NEHAP)

Funds: State budget (Ministry of Health)

This project is multiyear study on national level with duration up to 2013, and it includes a chapter “*Non-ionizing radiation*”. The main research group that collects data on EMF levels in the working and living environment, develops databases for sources of radiation and overexposures, evaluates the risk for workers and population, and that analyses the public concern, is the team working for the National Centre of Public Health and Analysis, Ministry of Health.

II. New Policies and Legislation regarding EMF exposure

1. Council Recommendation of the Limitation of Exposure to the General Population EC/1999/519 is still in a stage of implementation in Bulgaria (probably June 2013).

Changes in the Health Law have been developed, and they are in the final stage of discussion, prepared for implementation by the Parliament. Those changes follow the requirements for legislation in the field of EMF published in “*Model Act*” and “*Model Regulations*”, WHO. A new chapter “Non-ionizing radiation” is included in the section 2: “Activities for public health protection”. There, most of the requirements proposed by WHO, ICNIRP, Council Recommendations 1999/519/EC have been implemented:

1. The responsible minister for evaluation of the EMF exposure to the general population and to take care about possible adverse effects is the health minister.

2. Two differentiated zones of exposure to the population are defined in following matter:

First zone (short-term stay) sets regions where only short-term human stay is possible: hard-to-access areas, slope roofs of residential buildings.

Second zone (access area) sets regions where temporary and/or periodical human stay is possible, as: agricultural lands, accessible roofs of residential buildings, residence areas, streets, electric transport.

Precautionary sub zone is a part of the second zone, and it sets “sensitive” in relation to risk perception regions defined as sites for public purposes: for recreation and leisure, recreation parks, health recreation facilities, facilities for elderly people, rehabilitation and social re-adaptation establishments, children centers, schools, kindergartens, healthcare

establishments. This sub zone is defined only for exposure to base stations in the frequency range 850 to 2150 MHz.

3. The exposure limits proposed in CR 1999/519/EC are accepted in the following way:

For the first zone the ICNIRP exposure limits – basic restriction and reference levels for the frequency range > 0 Hz to 300 GHz are accepted.

For the second zone the strategy is to keep the actual exposure limits that are in use in Bulgaria. It means frequencies from 30 kHz to 30 GHz.

For the precautionary sub zone the proposal for the limit has been proposed by the population, and it is $1 \mu\text{W}/\text{cm}^2$ ($0.01 \text{ W}/\text{m}^2$). It is clear that this decision is political.

4. There is a legal procedure for implementing of sources of radiation emitting in residential areas that every owner should pass. It includes calculation of safety zone around the source corresponding to the accepted limits, and spot measurements for control of the emission. The main health inspector gives the permission for construction or mounting the equipment.

5. The law requires to create and to support database consisting the sources of radiation, the levels of exposure, and all other documents concerning the permission for use.

6. The information in the database should be open for public access.

7. Sanctions for the industry are recorded in case of overexposure or illegal construction of sites.

8. The law implements the “Agency” proposed in the “Model legislation...” – the National Centre of Public Health and Analysis (NCPHA) belonging to the Ministry of Health, and gives it the responsibility for developing databases, training of the control bodies, developing methods for exposure and risk assessment of EMF exposure.

9. Control bodies are the regional health inspections belonging to the Ministry of Health.

10. Finally, but very important is the responsibility of the Ministry of Health to introduce in few months after the law an Ordinance with concrete description of the exposure limits, methods of measurement and dosimetry, methods of evaluation of the exposure, some precautionary measures.

Unfortunately, in those changes there is no any requirements for continuous collection of data of measurements, permanent or periodical control of the EMF levels (how often or how many sources per year), no requirements for competence of the experts doing measurements.

The changes made in the Health Law have led to changes in other laws, as the Law of Territory Construction.

This policy has been presented at the workshop on risk communication in February 2013, Brussels.

2. European Directive for protection of workers exposed to EMF (on the basis of the first draft Directive 2004/40/EC) is in a process of discussion in a level of European Parliament, and the Bulgarian delegation participates active in the process of improvement.

3. Directive 2006/25/EC of the European Parliament is in action from June 2010. The Guide for practical application has been finalized, and it has been proposed to the Ministry of Health and to the Ministry of Labour and Social Affairs for implementation. (probably in June 2013).

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

indoor sun exposure consultant is in a stage of consultations for implementing (probably in the end of 2013).

III. Areas of public concern and national responses

The number of complaints in Bulgaria decreases in the last two years. Our explanation of this process shows different reasons: more adequate information for the people, more clear messages from the scientists, hard work of the responsible specialists in the field of risk communication. The tiredness amongst the activists and the appearance of other deeper problems as poorness, unemployment are also good explanation of the decrease of the interest but with smaller importance.

On the other hand there are still citizens complaining or requesting the remove of antennae or canceling their building up near to schools, kindergartens, hospitals, residential areas.

Exposure assessment shows “overexposure” in not more than 3% of the places of concern. It is important to be mentioned that “overexposure” concerns only the Bulgarian legislation which is conservative - the limit value for microwaves is $10 \mu\text{W}/\text{cm}^2$. Compared with the limits recommended by EC (ICNIRP), they are 45 to 100 times more stringent for the frequencies used by the GSM technology.

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 control laboratories, regional inspections.*

2. *Members of the Bulgarian National Program Committee participated on different international meetings presenting results of their work in the field of EMF.*

3. *Website of the BNPC and Foundation “Faraday” with regional information for Bulgaria and links to the International EMF Project of WHO:*

www.emfbg.com

4. *“Hot” telephone numbers for the general population for every kind of questions in the field of EMF safety.*

5. *Annual meeting of the BNPC with representatives of mobile communication companies, health inspections, municipalities, Ministry of Health, NGOs, international participation from companies providing measuring equipment has been conducted.*

In Malta, 2012, it was decided the next international meeting organized by the Mediterranean countries ***“Biological Effects of Electromagnetic Fields” (8th EMF Workshop)*** to be held in Bulgaria, **15 - 20 September 2014**, in a small resort near Black sea. Our BNPC started the activities for organizing high level of meeting with advantages for the scientific society dealing with NIR health and safety. We intend to focus this meeting mainly to the occupational risk of EMF, to the new legislation concerning EMF and UV radiation, also to possible long-term effects of EMF.

All you are welcome to attend this meeting. We hope that it will be a possibility for our research societies working in the field of non-ionizing radiation health risk assessment to discuss new scientific results and to find better way for collaboration. There, we will try to give better opportunity for young scientists to present their research studies. The website for the meeting is in construction, and the link will be:

<http://emf2014.emfbg.com/index.html>

Welcome to the 8th *EMF Workshop in Bulgaria!*

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