

## **Expert Advisory Board (EAB) – Bulgaria, Ministry of Health**

### **International EMF Project**

#### **REPORT**

#### **22<sup>th</sup> International Advisory Committee Meeting WHO, Geneva, 28<sup>th</sup> – 30<sup>th</sup> June 2017**

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

#### **Ongoing projects**

**The main project in this period is:**

**Project BG 07:** Programme “*Public Health Initiatives*”, Reference: BG 07-PAF – NFM&FM EEA: “*Improving control and information systems in risk prevention and healthcare*”.

**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

**Duration:** up to 30 April 2017

**Overall objective:** *Improving public health through the development of healthcare information systems*. It includes 3 different electronic registers: one for the patients with diabetes, one for patients with rare disease, and the third – for sources of EMF radiation (base stations for mobile communication and TV stations).

#### **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 results in the followings areas are as follows:

- Implementation of an Ordinance for protection of workers transposing EU Directive 2013/35/EC and implementing the European practice in the field of control of EMF exposure through the Practical Guides;
- New proposal for change in the Health law implementing special chapter “Non-Ionizing Radiation” with the requirements proposed by the WHO publication “Model legislation for electromagnetic fields legislation”;
- New proposal for an Ordinance implementing the requirements of Council Recommendations 1999/519/EC

- Web-based electronic register of sources of EMF radiation (base stations and TV stations) with two possibilities for access: one for specialists and administration with data of coordinates of the source, technical characteristics of the antennae, safety zone, measurements data, exposure assessment; and second – web-based, for the general population with information about the coordinates of the source, measurements and data of exposure;
- Spectrum analysis of the EMF in more than 20 “sensitive” areas with hospitals, schools, kindergarten, also with complaints of individuals;
- Real time monitoring of EMF levels around communication sources – on the same 20 areas described above;
- Database of sources of EMF radiation implemented into the register – more than 60% of the base stations and all TV stations in the country;
- 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;
- Improving the quality of the control of EMF in residential areas by training and education of more than 80 specialists involved in measurements, control and exposure assessment
- Publishing of “*Methodological Guide for protection against non-ionizing radiation*” – a guide for training the specialists in the field of measurements and control of EMF.

### **Scientific forums and publications:**

Ts. Shalamanova, M. Ivanova, M. Israel, I. Topalova, P. Ivanova, R. Petrova, M. Dimitrova - *EMF exposure of the general public after digitalization of broadcast technology*, RAD 2016, Nis, Serbia.

V. Zaryabova, M. Israel, Ts. Shalamanova – *Electronic register of sources of EMF in residential areas*, Second Congress of Preventive medicine, St. Zagora, Bulgaria, 2016.

*Methodological Guide for protection against non-ionizing radiation*, Under Editing of prof. M. Israel, NCPHA, Sofia, 2017, ISBN 978-954-8404-35-8.

*Implementation of the EU Directive 2013/35/EC into practice*, National Conference of Occupational health and safety, May 2017, Obzor, Bulgaria.

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

**1. The second national meeting of the Bulgarian Expert Advisory Board** (developed on the basis of the formal Bulgarian National Programme Committee) has been held in December 2016. The main topic of the meeting was “*Electromagnetic exposure to workers and population from artificial sources of radiation. European legislation and improvement the control in Bulgaria*”.

The main discussed areas were the followings:

- European Directive 2013/35/EC for protection of workers against EMF radiation. Implementation in the Bulgarian legislation
- Methods for exposure assessment of EMF in residential areas with the purpose to provide data for the national electronic register of sources of EMF radiation
- National database and register of sources of EMF in the residential areas
- Improving the control of EMF in the working and living environment.

More than 50 people attended the meeting: the Deputy Minister of health (the Main Governmental Health Inspector of Bulgaria), representatives of the Health Inspectorates, municipalities, telecommunication and construction companies, specialists in the field of control of EMR, member of the Bulgarian Expert Advisory Board.

Some of the results achieved after discussion were the followings:

- There is a need of training in the field of control of EMR in the working environment concerning the EU Directive 2013/35/EC. The qualification of the specialists in the field of measurement and exposure assessment of EMR should be improved.
- There is a need of training the control bodies of the Ministry of Labour and Ministry of Health in the field of exposure assessment of EMR concerning exposure limits and action levels.
- The accredited bodies should be trained to follow the requirements of the EU Directive for protection of workers against EMF exposure, as well.
- The Expert Advisory Board should do everything for implementation of the changes of the Health Law, also the new Ordinance for protection of the general population against EMF exposure. Here, the Ministry of Health should be the main engine for the implementation of these changes.
- The new web-based register of EMF sources in residential areas should be filled in with new information, and it should be used for better communication with the people.

**2. The EU Directive 2013/35/EC for protection of workers against EMF radiation** is in a power from 1<sup>st</sup> March 2017. The three parts Practical Guides are published on the website of the Ministry of Labour and Social Affairs and on the NCPHA website.

More than 100 specialists have been trained by our EAB from the industry, Occupational health services, Bulgarian Accreditation Body.

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

The main challenge in this field is the development of an *electronic database (registry) of sources of EMF in residential areas*.

The achieved outputs concerning this part of the cited Project above are the followings:

- Data and electronic register of more than 60% of the base stations and 100% of the TV stations as sources of radiation: addresses, technical characteristics, data of spot measurements, safety zones around the sources collected at a national level;
- Register of complaints consisting of 463 individual cases;
- Database of EMF exposure (web-based) as a basis for taking decisions for risk management in specific regions and at national level;
- Training courses for specialists performing measurements and exposure assessment.

The web-based register of sources of EMF radiation in residential areas gives the opportunity for the people to have information for the location of the station, for measurements performed in the area of the source, also for the exposure if such information exists. We believe that this information will decrease the complaints because of more information provided to the people concerning the EMF exposure.

In addition, the electronic register consists of a part “Complaints” where every new complaint will be included into the database. This is important for the control bodies and also

for the health administration to take adequate measures to solve the problems of the individuals. In this register there are more than 450 complaints collected for a period of 10 years.

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

##### **1. News and publications in newspapers and websites**

During the reporting period many activities concerning publicity of the work connected with the Project “*Improving control and information systems in risk prevention and healthcare*” have been performed:

*Seven publications in national newspapers* presented the progress of the Project in the field of development of web-based registry for sources of EMF - BG 07 “*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*”;

In addition, a special *home page* was organized as a part of the website of NCPHA where every activity had been published online for public information:

[http://ncpha.government.bg/index.php?option=com\\_content&view=category&id=317&Itemid=528&lang=bg](http://ncpha.government.bg/index.php?option=com_content&view=category&id=317&Itemid=528&lang=bg);

*Distinctive signs* (banners) visualized the electronic register performed by the Project have been printed, also 500 *information leaflets*;

*Two press conferences* reporting results and presenting outcomes reached during project activities have been organized at the reported period;

*Methodological guide (Manual) for protection against non-ionizing radiation* was printed and provided for specialists and control bodies.

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