

# **Russian Federation**

## **Report on EMF Activities**

### **9<sup>th</sup> International Advisory Committee Meeting on EMF**

**June 2004**

EMF researches being conducted in Russia concentrated on study of bioeffects of modulated and non-modulated RF EMF of low intensities and electromagnetic pulses on model systems, laboratory animals, chicken embryos. The main researches are hold by Institute of Biophysics (Pushino, Moscow region), Institute of Biophysics (Moscow), Institute of Occupational Health RAMS, Medical Radiological Scientific Center (Obninsk), Northern-West Scientific Center of Hygiene and Public Health, Center for Electromagnetic Safety.

Institute of Occupational Health RAMS and Center for Electromagnetic Safety held the research on development of safety criteria for population of power frequency magnetic fields. According to experimental research results (on animals) and analysis of scientific data the maximum permissible exposure level of 50 Hz magnetic field for residential areas was proposed for: indoors – 5  $\mu\text{T}$ , outdoors – 10  $\mu\text{T}$ . Work on the classification of magnetic field sources in residential areas; data analysis of standardized magnetic fields measurements (for the period of 1999–2003) in non-occupational conditions.

The long-term program on monitoring of electromagnetic situation near mobile communication base stations is realized by Center for Electromagnetic Safety. The data of standardized EMF measurement (1999-2003) in residential areas and near antennas are accumulated and analyzed. Some results would be presented at the International conference “Mobile communication: medical, biological and social problems” in Moscow (September 20-23, 2004). On behalf of WHO the draft of experimental protocol is developed on replication of research results obtained in former USSR devoted to study of immunological status after chronic exposure by RF EMF of low intensities (50–1000  $\mu\text{W}/\text{cm}^2$ ).

Now the Russian National program “Mobile communication and human & environmental safety” is developed. The Program project would be presented and discussed at the International conference in Russia (Moscow, September 20-23, 2004).

Russian National Committee on Non-ionizing Radiation Protection (RNCNIRP) regular coordinate EMF researches conducted in Russia on assessment of mobile telecommunication EMF safety for population.

RNCNIRP presented the proposals on methodology of EMF standardizing at the International meeting in China (Gualin, October 13-17, 2003) Grigoriev Yu. “Harmonization options EMF standards: proposal of Russian National Committee on Non-Ionizing Radiation Protection”.

Several new hygienic EMF standards are enforced in Russia in June 2003 (detailed information at WHO [http://www.who.int/peh\\_emf/standards/en/](http://www.who.int/peh_emf/standards/en/) and RNCNIRP [http://www.pole.com.ru/news\\_en.htm](http://www.pole.com.ru/news_en.htm) sites). The MPEL weren't changed. The modifications were applied to the documents structure, methodology of EMF measurements, the comments for special cases were also added. The methodology of EMF measurement from mobile

phones was endured to significant changes. The new methodology raised a conflict at mobile phones certification. Ministry of Health according to RNCNIRP opinion officially recommended to limit use of mobile phones to children under 18 years old, pregnant women and implanted medical devices (SanPiN 2.1.8./2.2.4.1190-03 "Hygienic requirements to land mobile telecommunication systems").

The hygienic standards for wide band electromagnetic pulses were adopted for the first time.

The new Federal law on Technical regulating came into force in Russia, which set the new principles of safety system for standardization and ionizing and non-ionizing radiation exposure. According this law all current hygienic standards till 2010 year should be replaced by Technical regulations. The development of Technical regulation on electromagnetic safety would be the function of the special Technical committee consisting of RNCNIRP members.

Because of realizing Governmental reform the new state body responsible for the development and adoption of EMF safety criteria is the Ministry of Health and Social Development. It was established in May 2004 instead of the former Ministry of Health and Ministry of Labor. The inspection functions on execution of hygienic requirements were passed to independent Federal Service (the both functions of standards development and control for standards execution before belong to Ministry of Health).

In this situation, the WHO Model legislation has a great importance for Russia and we plan to discuss the possibility of its use as a basis for Russian EMF safety system at the conference in Moscow.

The majority of conflicts between population and mobile communication companies are occurred in connection with base station erection. RNCNIRP members hold education work on EMF problem with population through printed and electronic mass media, television. The communicatory program "Mobile communication and health" is developed for population. Information on EMF problem is regular presented at Russian web-sites: "EMF and Health" <http://www.pole.com.ru/> and "Mobile communication and Health" <http://www.ecopole.ru/>. During the last year in Russia were published more than 60 scientific papers devoted to EMF bioeffects and public electromagnetic safety.

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