WHO International EMF Project

Annual national report on EMF activities in

Croatia

for the years 2016-2017

Contact person: Prof. Dr. Antonio Šarolić

FESB, University of Split

Ruđera Boškovića 32, 21000 Split, Croatia

Tel/Fax: +385 21 305 700, E-mail: antonio.sarolic@fesb.hr

1. General research activities related to EMF and health

The research activities are undertaken as academic research at Croatian universities.

Currently there is no ongoing large-scale nationally funded project studying the harmful effects of EMFs, however the activities are sustained as smaller projects and individual studies. The research is more intense in the field of EMF dosimetry than in the field of biological interactions.

Thanks to the large-scale <u>EU COST Action BM1309 "EMF-MED"</u> coordinated at FESB, University of Split (<u>cost-emf-med.eu</u>, 35 countries involved), there is an increasing research interest and activity related to beneficial effects of EMFs. Several studies have been started in the field of biological interactions, biomedical applications / medical devices, and EMF dosimetry. More specifically, the research at the University of Split is ongoing on several EMF-MED related topics: electrical neurostimulation, EMF-biological interactions as the basis for non-thermal EMF cancer treatment, EMF dosimetry including dielectric properties of biological tissues.

2. New policies and legislations regarding EMF exposure

The existing legislative on human protection from EMFs was last updated in 2016 by the "Ordinance on health requirements to be fulfilled by workers working with non-ionizing radiation sources" ("Narodne novine", no. 59/16), and in 2014 by the "Ordinance on protection from electromagnetic fields" ("Narodne novine", no. 146/14). Both ordinances are subsidiary acts of the "Law on protection from non-ionizing radiation" from 2010 ("Narodne novine", no. 91/10).

Human protection from EMFs is under jurisdiction of the Ministry of Health within the scope of Sanitary Inspection department, which is in charge of inspection, management and other activities related to control of the radiation protection legislation implementation.

Certain activities on EMF protection control are also undertaken by the <u>Croatian Regulatory Authority for Network Industries (HAKOM)</u>. HAKOM is an independent, autonomous and non-profit legal entity with public authority, governed by the Council appointed by the Croatian Parliament and the Government of the Republic of Croatia, reporting annually to the Croatian Parliament and to the Government of the Republic of Croatia. HAKOM is in charge of regulation of electronic communications in Croatia, and protection from EMFs generated by electronic communications equipment is a part of its activity.

The implementation of the legislative is supported by Croatian standards on EMF protection, which are under jurisdiction of <u>Croatian Standards Institute</u> (HZN) technical committee <u>HZN TO E106 "Electromagnetic fields in the human environment"</u>. This TC follows the activities of the relevant international standardization committees IEC TC 106 and CENELEC CLC/TC 106X.

3. Areas of public concern and national responses

The public concern is dominantly directed to the mobile operator base stations. The concerns range from numerous individual complaints to the organized campaigns. The concerns are often covered in daily newspapers (several times a year), and the concerned citizens have recently founded the <u>Croatian association for electromagnetic radiation protection (HUZEZ)</u>.

The national response is given by the Ministry of Health in the form of public information activities. Furthermore, HAKOM undertook a large-scale EMF measurement campaign in the vicinity of schools, kindergartens, and playgrounds.

4. New public information activities

Ministry of Health maintains a dedicated web page, and communicates with concerned citizens. In addition, two downloadable brochures for the public were published in 2016: a descriptive brochure explaining the EMF protection principles, and a Q&A brochure.

https://zdravstvo.gov.hr/o-ministarstvu/djelokrug-1297/sanitarna-inspekcija/zastita-od-zracenja

https://zdravlje.gov.hr/UserDocsImages//dokumenti/Tekstovi%20razni//Brosura-NEM.pdf https://zdravlje.gov.hr/UserDocsImages//dokumenti/Tekstovi%20razni//Letak%20pitanja%2 0i%20odgovori.pdf

HAKOM maintains a dedicated web page with links to the relevant legislation, and has a contact point for public inquiries. Furthermore, HAKOM published the results of the 2016 measurement campaign both as the public release and in a graphical form on its GIS portal. The measurement locations are shown on the map and linked to the database of the results.

https://www.hakom.hr/default.aspx?id=8230

http://mapiranje.hakom.hr/CellRadiationMeasure