

HELLENIC REPUBLIC
Report on EMF activities
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New legislations and policies

- The Law No. 4053, Act. No. 44/A/07.03.2012, established an “one stop shop” procedure for the licensing procedure of antenna stations in order to improve and fasten the existing procedure. According to this law, the licensing procedure for new base stations can be completed in 4 months. In December 2012, the provisioned in this law, information system for controlling the licensing procedure for antenna stations, developed and administrated by EETT (Hellenic Telecommunications and Post Commission), has started its operation. The exposure levels of the general public in the vicinity of antenna stations are assessed, in every case, through the electromagnetic emissions studies uploaded in the above mentioned information system by the antenna operators, in order to be examined by the Greek Atomic Energy Commission (GAEC) which gives its expert opinion.

- In view of the forthcoming new Directive of the European Parliament and the Council on the protection of workers from risks to their health and safety arising from exposure to electromagnetic fields during their work, which will repeal the Directive 2004/40/EC, the Ministry of Labour, Social Protection and Welfare in cooperation with GAEC, has taken the initiative to design and carry out a measurement campaign and a risk assessment programme, in order to identify the existing situation concerning occupational exposure to electromagnetic fields in various working environments in Greece. This programme was agreed, under a memorandum in progress, to start by performing measurements in specific locations where high levels of occupational exposure are likely to be found.

- The second interlaboratory comparison programmes concerning RF and ELF measurements have been organized according to the provisions of the greek legislation, in February and May 2013 respectively, in Athens, by GAEC in cooperation with the High Voltage Laboratory of the National Technical University of Athens. More than thirty laboratories from Greece and Cyprus have participated. The purpose of these programmes was to demonstrate the technical competence of the participating laboratories, to identify problems in laboratories and incite corrective actions if needed and to check the effectiveness and comparability of the used measurement methods.

Public concern and national responses – New public information activities

- According to the law that has been put into force in March 2012 (Law No. 4053, Act. No.44/A/07.03.2012), the *National Observatory of Electromagnetic Fields* was established, which is a network of fixed, semi-fixed and mobile measurement stations in order to continuously monitor the EMF levels from antenna stations all over Greece. The results of this national monitoring network which will be operated and controlled by GAEC, will be presented through a geographical information system in a very comprehensive and user friendly web portal (providing also other relevant information and services) in order to be assessed by every citizen.

In August 2012, the Ministry of Infrastructure, Transport and Networks has organized a public consultation on a draft legislative decree which defines all relevant details concerning the organisation, the deployment, the funding, the operation, the expansion and the maintenance of this vast measuring network. The comments of this public consultation were taken into account in the final text of two joint ministerial decrees (including a technical regulation) that are now ready to come in force. Some main points that are being defined in these decrees, are the following :

- the roles and responsibilities of the stakeholders (e.g. the municipal authorities) that are going to be involved in the installation, the operation and the maintenance of this network
- criteria for choosing installation sites for the fixed monitoring stations and criteria for the relocation of stations
- criteria for the interconnection with the existing monitoring systems in Greece (projects: HERMES-www.hermes-program.gr, PEDION24-www.pedion24.gr and FASMA-www.fasmaprogram.gr)
- quality control procedures and tests for the acquired results
- presentation of results and provision of services to the involved stakeholders and the public

For the development of the above mentioned network, the project titled *National Observatory of Electromagnetic Fields* is implemented by Information Society S.A. on behalf of Ministry of Infrastructure, Transport and Networks as well as GAEC. To this effect, an international call for tenders has been launched in September 2012 with a total budget of 4,8 M€, that covers the procurement and deployment of 500 fixed (broadband and frequency selective) and 13 mobile (vehicle mounted) monitoring stations, throughout Greece, as well as the development of the data processing center and other necessary systems for the operation of the whole network. The procedure for selecting the final contractor, is in progress. The project implementation duration is 22 months and following this time frame, normal operation of the system will commence.

- “BioEM2013” which is the Joint Meeting of The Bioelectromagnetics Society (BEMS) and the European BioElectromagnetics Association (EBEA) will be held in Thessaloniki, from June 10-14, 2013. As the premier international conference in the area of bioelectromagnetics, BioEM2013 is expected to stimulate further research in this field through the exchange of ideas and lively debate on state-of-the-art knowledge, as well as gaps to be filled.

-An intensive workshop on "Current Topics in NIR Protection" organized by the Technological Educational Institute of Patras with ICNIRP participation, will take place in Patras on 17-06-2013. The workshop will cover topics on NIR Sources, Biological Effects, Emissions, Exposures, Protection Guidelines and Protocols.

- An international call for tenders has been launched in May 2013 by GAEC, inviting all interested accredited laboratories to perform in situ measurements in the vicinity of 1500 antenna stations installed all over Greece, in the framework of the greek legislation that demands annual measurements in at least 20% of all antenna stations installed in urban areas. The results of all measurements performed in the vicinity of antenna stations, are uploaded to GAEC's web site (www.eeae.gr). Until May 2013, the results of in situ measurements in the vicinity of more than 4300 base stations are uploaded to this webpage.

Some new publications from greek researchers

- Radiofrequency exposure in greek indoor environments. Markakis I, Samaras T (2013), Health Phys 104 (3): 293 – 301
- Numerical modeling of heat and mass transfer in the human eye under millimeter wave exposure. Karampatzakis A, Samaras T (2013), Bioelectromagnetics 34 (4): 291 – 299
- Transient and cumulative memory impairments induced by GSM 1.8 GHz cell phone signal in a mouse model. Ntzouni MP, Skouroliaou A, Kostomitsopoulos N, Margaritis LH (2013), Electromagn Biol Med 32 (1): 95 – 120
- Continuous electromagnetic radiation monitoring in the environment: analysis of the results in Greece. Manassas A, Boursianis A, Samaras T, Sahalos JN (2012), Radiat Prot Dosimetry 151 (3): 437 – 442
- E. P. Nicolopoulou, I. F. Gonos, I. A. Stathopoulos and E. Karabetsos, "Two Interlaboratory Comparison Programmes on EMF Measurements performed in Greece", IEEE Electromagnetic Compatibility Magazine, Vol.1, Q.2, 2012, pp. 50-59.