

National activity report – ISRAEL 2013

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General Research Activities related to EMF

A new information center on the health impacts of non-ionizing radiation – was jointly founded and financed for the next 3 years by the Environmental Protection and Science Ministries. Following a national tender, the decision was that the center will be operated by the Cancer and Radiation Epidemiology Unit at the Gertner Institute jointly with Holon Institute of Technology and led by Prof. Siegal Sadetzki. The purpose of the center is to provide balanced information on the health impacts of non-ionizing radiation based on scientific evidence. Relevant information from Israel and other countries pertaining to non-ionizing radiation will be collected including the effects of electromagnetic radiation on health; the means of reducing exposure; legislation and policy; and sources and dosimetry of non-ionizing radiation. The relevant information will be provided - mainly through a website established for this purpose as well as through annual reports. Four major target audiences were identified: the general public; government offices; the research community; and the industry.

A multidisciplinary steering committee oversees and supports the center's activities. Once the information center is set and running the next stage will be the promotion of basic research and research relevant to the Israeli population.

The results of a study performed by the Environmental Protection and Education Ministries demonstrated that the exposures to non-ionizing radiation in schools are very low. Only in a few classrooms and staff's rooms close to electric panel boards the ELF levels were elevated (4 to 20 mG). The measurements related both to ELF and RF interior and exterior sources.

Israel is one of 14 countries participating in the Mobikids study evaluating the potential risk of environmental exposures, including use of communication devices and other exposure to electromagnetic fields, on the development of brain tumors. This study is executed within the 7th Framework Program of the European Union.

New Policies and Legislations Regarding EMF Exposure

New formats for the preliminary and measurement reports from RF mobile base station units were distributed to the cellular operators. The new formats were related to the operational need for changes in azimuth, tilt and power of the operating sectors of the mobile base station permits. The permits are granted based on the highest exposure scenario.

Bill proposal on cell phones - In March 2012, a bill requiring all cellphones sold in Israel to bear a health-hazard warning label ("Warning - the Health Ministry cautions that heavy use and carrying the device next to the body may increase the risk of cancer, especially among children.") passed its first of three readings into law. The bill also requires all advertisements of mobile phones to bear the warning. In addition, all advertising targeting minors would be banned under the law and breaking the law would be a criminal offense.

The railway electrification project – a threshold of 4mG (as a daily average on the day with the highest traffic) for 50 Hz magnetic field was adopted, with respect to continuous and

prolonged exposures for sensitive land uses in the vicinity of the railway. The project, pending an approval of the National Infrastructures Committee, will use a 25 kV, 50 Hz overhead power supply.

A standard for magnetic field from the electricity network – Following a professional assessment of this issue, a joint position was formulated by the Health and Environmental Protection Ministries. According to this position, a threshold of 4mG (as a daily average with the highest electrical usage) for 50 Hz magnetic field should be adopted with respect to continuous and prolonged exposure, and 2,000 mG for short-term exposure.

Areas of Public Concern and National Responses

Indoor distribution substations – are still a public concern. In the past, the low-voltage cables exiting the distribution transformers were conducted close to the ceiling of the transformer's room that is in many cases the floor of the apartment above. By now most of such situations were fixed by the Israeli Electric Company by moving the cables and the low voltage electricity panel board close to the floor of the transformer's room, and as far away as possible from the habitat places. Even so, no people are willing to live in apartments above indoor distribution substations and the recommendation is to site distribution substations either in the open spaces or below open spaces.

New mobile cellular base stations – needed for the deployment of the two new cellular network operators, who joined the existing three others. Those are received with concern and intense opposition by the public and as a consequence by the local authorities. As a response, all stakeholders are consulted to enable and promote the co-location of sites of the different operators. Up to date, the voluntarily based co-location is implemented for less than 20% of the sites.

Wi-Fi in schools – is the subject of a petition to the Israeli Supreme Court requesting the Ministry of Education to ban the use of Wi-Fi in Schools. The plaintiffs are the National Parents' Leadership and the Organization for "Sensible" Use of Cellular Technology.

The Ministry of Education's policy, based on the recommendations of an inter-ministerial committee, is to prefer wired internet whenever possible except for the rare cases where installing wired internet is cumbersome or may pose a safety hazard.

The petition is based on the fact that despite the declared policy, the Ministry of Education encourages schools to install Wi-Fi through the funding of wireless networks in schools and kindergartens.

Guidelines for WiFi networks in schools in Israel are currently being established by a multidisciplinary team from several ministries based on the precautionary principle and the common notion that the young population is generally more sensitive to health hazards.

New Public Information Activities

Mobile Cellular operators' internet site – provides information on the siting policy of new base stations and issued an animated movie about the advantages of many, low power base stations as opposed to low density, high power base stations.

The Israel Electric Company internet site – presents the results of measurements performed according to the radiation permits. This is enhanced with explanations about the electric and magnetic fields, national and international policies as well as possible measures to reduce exposures.