

Israel

Report on EMF Activities

10th International Advisory Committee on EMF

June 2005

S. Ghelberg (Ministry of the Environment)¹
S. Kandel (Soreq NRC)²

The Committee of experts mandated by The Ministry of the Environment (MOE) to "Establish an Israeli guideline for power frequency electromagnetic fields for the general public" concluded its task. It recommended that the reference level for short-term acute exposures should be as recommended by ICNIRP 1998, supplemented by a cautionary approach. The authorities should exercise this approach, based on the precautionary principle, and where feasible magnetic field exposure should be reduced at low or no cost. The Committee of experts proposed such low or no cost measures and recommended the establishment of a public committee aimed to prioritize the implementation of the measures for new and existing facilities in order to minimize the proportion of the population exposed to magnetic fields higher than those considered possible carcinogenic based on the epidemiological evidence. The committee also recommended an annual fund be established in order to take these precautionary measures.

A committee was appointed by The Ministry of Science in order to test if establishing a National Research Center for the Effects of Non Ionizing Electromagnetic Fields to Health is necessary in Israel and if so how it should be established and what its role should be.

Non Ionizing Radiation law drafted by MOE was presented again to the Government Legislation Committee. The committee approved the draft, which will be passed to the Israeli Parliament, and asked that the incorporations in the regulations of costly measures be approved not only by MOE, but also by the Ministries of Treasury, Health, Communication and Infrastructure.

There were numerous discussions in different Knesset (Israeli Parliament) Committees concerning the health effects associated with exposure of the general population to NIR from base stations, mobile communication systems and other RF antennae (reference levels imposed are 10% of ICNIRP levels for continuous exposure of the general public to RF frequencies).

Numerous discussions in the Knesset Committees and the media concerning the health effects of exposure of the general public to magnetic fields from power and distribution lines as well as exposures from power transformers sited in office and residential buildings.

The Knesset was also concerned about the dissemination of information to the public on the location of NIR sources and measured fields in the proximity to these sources.

¹ Head Radiation Safety and Noise Abatement Division. stelian@environment.gov.il

² NIR Sector ,Radiation Safety Division. kandel@soreq.gov.il

As a result of the public concern, some Knesset members have drafted private Non Ionizing Laws stating what policies should be recommended in order to adequately protect the public and provide the public with relevant information. One draft indicates that compensations need to be paid to those whose health has been impaired by the NIR sources or to compensate for the devaluation of real estate due to proximity to NIR sources (RF and ELF stationary sources). These drafts are in preliminary stages and are discussed at this stage in Knesset committees.

The National Planning and Building Board decided to increase the discretion of the planning committee in local authorities with regard to subjects other than landscape considerations including public concern (but not radiation safety) and to require mobile phone companies be liable for 80% of accepted indemnity claims against local authorities for reduced property values attributed to the existence of a base station.

Supplementing the existing interactive map of the transmitting cell-sites, a new interactive map, including the newly approved cell-sites was added to the MOE's website. The Hebrew website is monthly updated and the radiation safety issue was recently inserted into the English website as well.

MOE provides free RF and ELF measurements. The Ministry's officials measured more than 500 RF sources and more than 300 ELF sources. Approved inspectors performed measurements around all-6500 cell-sites and the results were checked by MOE. Some 800 cell-sites were added in the past year. New improvements were implemented in the computerized management of cell-sites surveys and measurement reports.

Soreq NRC finalized a National survey of occupational exposure to RF fields. The survey was funded by the Ministry of Labor and comprised of thousands of measurements in hundreds of workplaces. The report identified the typical accidental exposure levels for different job classifications and calculated the time integrated and collective dose. Recommendations include priority setting of job categories and techniques to be used to reduce exposures. This study may be used as a base for future epidemiological studies of the Israeli working populations.

Soreq NRC published a National survey of environmental RF levels. The contribution of different RF sources to environmental EMF levels in urban, rural and open field areas was assessed.

The results of all the many RF and ELF exposure surveys carried out throughout the country show that the RF exposures are below MOE's recommendations while some ELF exposures, from under floor heating systems, from basement transformer units, near electricity distributions infrastructure, etc. are much higher than justifiable.