

# Japan

## Report on EMF Activities 10<sup>th</sup> International Advisory Committee on EMF June 2005

Concerning possible health risks to humans, several Japanese ministries are currently active in studies and health evaluations, related legislation, and information dissemination.

### • General Research Activities in Japan Related to EMF

The Ministry of Health Labour and Welfare has undertaken to elucidate the possible effects of ELF- and RF-EMF exposure: general public studies are conducted by the National Institute of Public Health; occupational health is studied by the Japanese Industrial Safety and Health Association.

In order to pursue scientific studies of RF-EMF effects, the Ministry of Internal Affairs and Telecommunications (MIC, formerly MPHPT) established, in 1998, "The Committee to Promote Research on the Possible Biological Effects of Electromagnetic Fields" in cooperation with other relevant organizations and institutions, including medical and engineering experts. The committee conducts research to investigate the biological effects of RF-EMF toward better safety and promotion efforts, making assessments in close liaison with leading medical, biological and engineering specialists in the field. From 2002, the second term of the Committee's research project extends until 2007. This fiscal year's budget is 400 million yen (US\$3.5 M). Committee of the study on human exposure to RF-EMF was established in 1997. Its purpose is to scientifically clarify the effect of radio waves from mobile telephone terminal and its base stations to human body. The research topics are internationally coordinate with WHO RF-EMF Research Priority. The member consists of 20 members from experts in relevant field such as technology, biology and medicine, manufactures and operators. MIC is financing this committee and gives financial assistance to the research of the members.

One of such animal experiments, the group confirmed that the impact causing the disorder of Blood-Brain Barriers could not be in radio frequency exposure over a period of one month at strength which does not cause thermal effects. Several experiments are going on; one of them is long-term exposure study using rats for two years which is equivalent to the life span of rats. The other is epidemiological study; or in other word, case controlled study on mobile phone use and brain tumor, this study is one of the INTERPHONE STUDY coordinated by IARC.

Human hazard issue of EMF should be conducted by international coordination and cooperation. Between Japan and Korea, we have been holding annual meeting since 1997. In June 2005, MIC has also exchanged information and promoted further cooperation among other countries including EC members, COST 281 experts and USA governmental officials (FCC) and IEEE experts at Washington D.C., USA

Since 1999, the Nuclear and Industrial Safety Agency (NISA), which belongs to The Ministry of Economy, Trade and Industry, has been examining the possible effects from power frequency MF exposure on tumorigenesis utilizing a two-stage carcinogenicity assay system in rodents, supervised by an independent peer review committee. A study on brain tumorigenesis has been initiated in 2004. For 2005, NISA is planning to conduct studies on lymphoma generation.

- **Public Information Activities**

To promulgate the possible risks associated with EMF, MIC and NISA have sponsored several open seminars regarding EMF and potential health effects for the general public.

To inform the public on the safety of power frequency EMF, NISA has organized a series of symposia held in several cities, and disseminated information by brochures and on the internet ([http://www.jet.or.jp/e\\_health/index.html](http://www.jet.or.jp/e_health/index.html)).

MIC has been subjected risk communication relating mobile EMF and its possible health effects for providing scientific information to public. Efforts for risk communication are press release on research by the Committee, publication of pamphlets and booklets to provide general information on EMF exposure to general public, local authorities, etc, organizing seminars and lectures to brief the latest information from experts, provide information from web site, and individual counseling (<http://www.soumu.go.jp/english/index.html>).