

EMR statement from Environmental Radiation Policy/Air Quality section

1 October, 2009
RE: REP408/JG/09

Further to your previous correspondence to Minister John Gormley's Office regarding the base station in the vicinity of Leixlip Garda Station I am writing to provide you with an update concerning this Department's policy on the health effects of electromagnetic fields.

The issue of potential health effects of mobile phone masts was comprehensively covered by the Expert Group Report published by Government in March 2007 entitled "Health Effects of Electromagnetic Fields", which is available for download on the Department's website (www.environ.ie/en/publications).

The Expert Group Report examined a wide range of issues in relation to the potential health effects of electromagnetic fields, including those produced by mobile phone base stations. It answers many of the health risk questions raised by the public in relation to the potential effects of electromagnetic fields. The Report and its recommendations were accepted by the Government and form the basis for current policy in this area.

The majority scientific opinion is that to date no adverse short or long term effects have been demonstrated from exposure to electromagnetic fields at levels below the limits recommended by the International Commission on Non-Ionising Radiation Protection (ICNIRP). However, a minority group of scientists believe otherwise and extensive international research continues to be coordinated through bodies such as the World Health Organisation (WHO). This research is co-funded by the Irish Government.

The Department's current advice to those living in close proximity to mobile phone base stations, based on the conclusions of the Expert Group Report, is that there is no scientific basis or evidence of adverse health effects in children or adults as a result of exposure to electromagnetic fields. This applies irrespective of the location of the phone mast.

TETRA, a dedicated digital mobile telephone system for emergency services, was considered within the scope of the Expert Group Report along with other new wireless technologies. TETRA operates at frequencies from 380 to 399.9 MHz and from 870 to 921 MHz. The TETRA base stations have outputs of a few tens of watts and are similar in this respect to standard GSM base stations except for the fact that TETRA base stations operate continuously, whereas GSM base stations operate only when mobile phone users in the area are making calls. However, the Expert Group did not report evidence that the special features of the signals from TETRA mobile terminals and repeaters pose a hazard to health. Emissions from TETRA base stations fall well within ICNIRP Guidelines.

The views of the Expert Group Report are consistent with the latest findings of the Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR), the European Commission's own expert advisory group on this subject. SCENIHR's most recent report "Health Effects of Exposure to EMF" was adopted on 19 January 2009. This report found that "no health effect has been consistently demonstrated at exposure levels below the ICNIRP limits established in 1998". The Report does also acknowledge knowledge gaps in a number of areas and SCENIHR has now produced a further paper identifying future research needs.

The Department also participates in the World Health Organisation's EMF Project, which aims to provide a coordinated international response to concerns about possible health effects of exposure to EMF. The EMF Project is fully funded by participating countries and agencies. The WHO recently re-affirmed its view that there is no evidence of adverse health effects arising from exposure to non-ionising radiation from mobile phones and their base stations.

The Commission for Communications Regulation (ComReg), the licensing authority for the telecommunications industry, commissions audit reports to verify that its licensed operators are in compliance with their licence conditions relating to emission limits for non-ionising radiation. The detailed measurement results from over 600 transmitter sites surveyed to date have so far shown total compliance. Recorded levels of radiofrequency signals are typically measured as being within the range of 0.002% to 2% of the safe exposure levels set by the ICNIRP guidelines. This is lower or comparable to radiofrequency exposures from radio and television broadcasts. The location of licensed telecommunications antennae and the results of individual site survey reports can be found on ComReg's website: <http://www.askcomreg.ie/mobile/siteviewer.273.LE.asp> .

The Government intends that a single agency will take on an advisory role regarding the health effects of non-ionising radiation and electromagnetic fields. This will be achieved by extending the statutory powers of the Radiological Protection Institute of Ireland (RPII) to include responsibility for non-ionising radiation. Until the transfer of function to the RPII takes place, this Department will continue to hold responsibility for these matters.

I hope you find this information useful.

Yours sincerely,

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