

**GOVERNMENT OF INDIA
COMMUNICATIONS AND INFORMATION TECHNOLOGY
LOK SABHA**

UNSTARRED QUESTION NO:598

ANSWERED ON:03.08.2011

ELECTRO-MAGNETIC RADIATIONS

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Will the Minister of COMMUNICATIONS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) whether World Health Organization (WHO) has recently evaluated electro-magnetic radiation from mobile phones for carcinogenicity;
- (b) if so, the details thereof and the reaction of the Government thereto;
- (c) whether the Government has formulated or proposes to formulate strict guidelines/norms for installation of mobile towers and manufacturing of mobile handsets in the country;
- (d) if so, the details thereof and the action taken by the Government in this regard;
- (e) whether a number of mobile handsets imported in the country particularly from China have high radioactivity; and
- (f) if so, the safety measures taken by the Government in this regard?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (SHRI MILIND DEORA)

(a) to (d) Yes, Madam. The International Agency for Research on Cancer (IARC), a part of World Health Organization (WHO), in its press release dated 31 May 2011 has classified radiofrequency electromagnetic fields as possibly carcinogenic to humans (Group 2B), based on an increased risk for glioma, a malignant type of brain cancer, associated with wireless phone use.

Subsequently, WHO in its Fact Sheet No. 193 of June 2011, has stated that there are some indications of an increased risk of glioma for those who reported the highest 10% of cumulative hours of cell phone use, although there was no consistent trend of increasing risk with greater duration of use. The researchers concluded that biases and errors limit the strength of these conclusions and prevent a causal interpretation. Based largely on these data, IARC has classified radiofrequency electromagnetic fields as possibly carcinogenic to humans (Group 2B), a category used when a causal association is considered credible, but when chance, bias or confounding cannot be ruled out with reasonable confidence.

WHO has further stated that a large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use. WHO will conduct a formal risk assessment of all studied health outcomes from radiofrequency fields exposure by 2012.

As per the existing policy for installation of towers, Wireless Planning and Coordination (WPC) Wing of DoT issues siting clearance for installation of mobile towers for each and every site from the point of view of interference with other wireless users, aviation hazards and obstruction to any other existing microwave links. Further, the licensee company is also required to obtain the permission from the concerned local bodies / municipal authorities.

Further, DoT has adopted the International Commission on Non-ionization Radiation Protection (ICNIRP) guidelines for limiting reference levels of Electromagnetic radiation from Mobile towers and incorporated the requirement in Access Service Licenses vide amendment dated 4 November 2008.

DoT, vide letter dated 8th April 2010, has directed all Cellular Mobile Telephone Service (CMTS)/Unified Access Service (UAS) licensees for compliance of the reference limits/ levels prescribed by ICNIRP by way of self certification of their Base Transmitting Station (BTS) for meeting the Electro Magnetic Field (EMF) radiations norms. All new BTS sites start radiating only after self certificate has been submitted to relevant Telecom Enforcement, Resource & Monitoring (TERM) Cells of DoT.

The TERM Cell tests up to 10% of new BTS sites randomly at its discretion. Additionally, the BTS sites against which there are public complaints, are also being tested by TERM Cell. If a site fails to meet the Electro Magnetic Radiation criterion, there is a provision of levy of a penalty of Rs. 5 lakh per BTS. Service providers must meet the criterion within one month of the report of TERM cell in such cases, after which the site is to be shut down.

With regard to mobile handsets, DoT has also adopted ICNIRP guidelines imposing basic restrictions in terms of SAR (Specific

Absorption Rate) value limiting to 2 W/Kg (averaged over 10g tissue) in the frequency range of 10 MHz to 10 GHz and have taken following steps for compliance of SAR value for mobile phones:

- (i) Indigenous manufacturers of mobile handsets have been instructed to comply with ICNIRP guidelines and furnish self-certificate.
- (ii) Mobile handsets manufacturers have been instructed to indicate the level of radiation on the product itself and to clearly communicate the potential danger of mobile phone radiation and exposure.
- (iii) To regulate indigenous as well as imported mobile phone, Bureau of Indian Standard (BIS) has been requested to frame standards for all mobile phones under BIS Act 1986.

Further, based on media reports and public concerns, DoT constituted a committee on 24 August 2010 consisting of representatives from DoT, Indian Council of Medical Research (Ministry of Health and Family Welfare), Ministry of Environment and Forest and Department of Biotechnology to examine the various studies on the effect of radiation from mobile tower and mobile phones. The report of the committee so received was placed on DoT website for stakeholders' comments. The report of the Committee is being examined by the Government for appropriate action in the matter.

(e) & (f) All major manufacturers publish the SAR value for mobile phones in the user manual and on its company website. Further, no cases have been reported to DoT regarding mobile handsets having radiation more than the limits prescribed by ICNIRP.