

**GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS**

**LOK SABHA
STARRED QUESTION NO.331
TO BE ANSWERED ON 9TH AUGUST, 2017**

EFFECT OF RADIATION FROM MOBILE PHONES

*331. SHRI RAM TAHAL CHOUDHARY:

Will the Minister of COMMUNICATIONS be pleased to state:

- (a) whether the Government has constituted an Inter-Ministerial Committee (IMC) to examine the effect of electric, magnetic and electro-magnetic field radiation from Base Transceiver Station and mobile phones on human health and if so, the details thereof;
- (b) whether the said Committee has given its report to the Government;
- (c) if so, the details thereof and the major recommendations of the Committee; and
- (d) the action taken/being taken by the Government in this regard?

ANSWER

**THE MINISTER OF STATE (IC) OF THE MINISTRY OF COMMUNICATIONS &
MINISTER OF STATE IN THE MINISTRY OF RAILWAYS
(SHRI MANOJ SINHA)**

- (a) to (d) A Statement is laid on the Table of the House.

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STATEMENT TO BE LAID ON THE TABLE OF THE LOK SABHA IN RESPECT OF PARTS (a) TO (d) OF LOK SABHA STARRED QUESTION NO. 331 FOR 9TH AUGUST, 2017 REGARDING "EFFECT OF RADIATION FROM MOBILE PHONES".

(a) to (d) Yes, Madam. An Inter-Ministerial Committee (IMC) consisting of officers from Department of Telecommunications (DoT), Indian Council of Medical Research (Ministry of Health), Department of Biotechnology and Ministry of Environment and Forest was constituted on 24.08.2010 to examine the effect of EMF Radiation from base stations and mobile phones. The Inter-Ministerial Committee (IMC) in its report, has examined the environmental and health related concerns and has indicated that most of the laboratory studies were unable to find a direct link between exposure to radio frequency radiation and health; and the scientific studies as yet have not been able to confirm a cause and effect relationship between radio frequency radiation and health.

Following are the major recommendations of the Inter-Ministerial Committee (IMC):

- i. Adoption of SAR (Specific Absorption Rate) level for mobile handsets limited to 1.6 Watt/Kg, averaged over a 6 minutes period and taken over a volume containing a mass of 1 gram of human tissue as per the FCC (Federal Communication Commission) norms of United States.
- ii. The RF (Radio Frequency) exposure limits in India may be lowered to 1/10th of the existing level keeping in view the data submitted by Cellular Operators Association of India (COAI)/ Association of Unified Telecom Service Providers of India (AUSPI) during presentation made to the committee and trend adopted by other developed countries.
- iii. DOT should create a national data base with the information of all the base station, their emission levels and display on public domain for public information.

Based on these recommendations following actions have been taken by Department of Telecommunications (DoT):

- i. Norms for exposure limit for the Radio Frequency Field (Base Station Emissions) has been made stringent and reduced to 1/10th of the existing limits prescribed by International Commission on Non Ionizing Radiation Protection (ICNIRP). The present Electro Magnetic Frequency (EMF) exposure limits as laid down for Base Transceiver Stations (BTSs) are as follows:

Frequency Range	E-Field Strength (Volt/Meter)	H-Field Strength (Amp/Meter)	Power Density (Watt/Sq.Meter)
400MHz to 2000MHz	$0.434f^{1/2}$	$0.0011f^{1/2}$	$f/2000$
2GHz to 300GHz	19.29	0.05	1

(f = frequency in MHz)

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- ii. Specific Absorption Rate (SAR) level for Mobile Handset has been revised from 2 watt per Kg averaged over a mass of 10 gram human tissue to 1.6 Watt per Kg averaged over a mass of 01 gram human tissue.
- iii. DoT has launched “Tarang Sanchar”, a web portal for Information sharing on Mobile Towers and EMF Emission Compliances. Tarang-sanchar is a portal which enables anyone to view, understand and conveniently obtain information on the Electro Magnetic Field (EMF) emission levels of Base Transceiver Stations (BTSS) of any technology (2G, 3G, and 4G) located across India. It provides a public interface where an easy map-based search feature has been provided for viewing the mobile towers in vicinity of any locality. The information on EMF compliance status of mobile towers can be accessed by general public through this portal. Detailed information about any tower site, if requested, is sent on email to the users. The portal has the complete collated technical details of over 14.5 lakh base stations (BTSS) spread across the country of all technologies (2G, 3G, 4G etc.) and of all Telecom Service Providers (TSPs).
