



Association of Unified Telecom Service Providers of India

AUSPI/12/2011/022

21st February, 2011

Dr J S Sarma,
Chairman,
Telecom Regulatory Authority of India,
Mahanagar Door Sanchar Bhawan,
Jawaharlal Nehru Marg,
New Delhi.

Sub: AUSPI's counter on the comments of a stakeholder on Consultation Paper No.1/2011 on Issues related to Telecommunications Infrastructure policy


Dear Sir,

We have gone through the comments of various stakeholders on the TRAI consultation Paper on Issues related to Telecommunications Infrastructure policy.

While going through the documents on TRAI website, we found that comments of a stakeholder is biased and are not based on facts. We are pleased to enclose herewith our counter comments on the views of this stakeholder.

Thanking you,

Yours faithfully,


S.C.KHANNA
SECRETARY GENERAL

Encl: As above

Copy to:

- 1) Shri R. Ashok, Member, TRAI
- 2) Prof. H S Jamadagni, Member, TRAI
- 3) Shri R. K. Arnold, Secretary, TRAI
- 4) Shri Lav Gupta, Pr. Advisor (TDRA), TRAI
- 5) Shri Arvind Kumar, Advisor (I&FN), TRAI



The comments are highly erroneous and provide a lopsided view towards EMF radiations from cellular towers and hand held mobile devices. The stakeholder Prof. Girish Kumar's comments completely undermines a whole body of research studies by reputed international institutes like World Health Organization, British Medical Association, International Commission on Non-Ionizing Radiation Protection (ICNIRP), Food And Drug Administration (USA), Indian Council for Medical Research, etc.

The comments seem to sidetrack firm standards & guidelines prescribed by ICNIRP and endorsed by WHO which are reliable safeguards for usage of mobile phones and **form the basis for the recommended human RF exposure standards in the European Union, Australia, much of Asia and Africa.** The comments of the stakeholder are spreading misconceptions regarding possible effects of EMF radiations from cellular towers. There is **no substantive or convincing evidence in the comments.**

Our counter comments on the various points raised by this particular stakeholder are as follows:

GENERAL

1. The comments of the stakeholder clearly avoid the scientific fact that the range of frequencies used for radio transmissions, radio frequency (RF) signals lie in the non-ionizing part of the electromagnetic spectrum and do not have enough energy to cause any genetic damage. It even fails to consider that the RF emissions from the mobile phones and base stations are some 50,000 times lower.
2. The issues raised over possible impact of EMF radiations are completely fallacious. **Studies by reputed organizations show that extremely low-level Electromagnetic Fields are produced by the base station antennas normally mounted on cellular mobile_towers and by handheld mobile telephone sets/radio terminals.**
3. The output of mobile phones is less than 1 Watt and is in fact far lower than the emission levels that emanate from the microwave /TV towers or even the radio towers.

I) HUMAN HEALTH VIS-À-VIS EMF

1. **ICNIRP** recently published a review of scientific evidence on the health effects of radio frequency exposure from mobile phone users and found that the existing evidence did not support an increased risk of **brain tumors** in mobile phone users within the duration of use yet investigated. (Ref. WHO Fact sheet No. 193 of May'2010)



2. Interphone study which is one of the biggest study conducted till date, on the assessment of the potential risk of glioma and meningioma – two main forms of brain tumor in relation to radiation from mobile. **The study included 2708 glioma and 2409 meningioma cases and matched controls was conducted in 13 countries using a common protocol. It was consequently inferred from the study that overall, no increase in risk of glioma or meningioma was observed with use of mobile phones.** The subsequent publication of the Interphone study added greatly to the volume of evidence available. (Note from the ICNIRP on Interphone Publication, Munich 18/05/2010)
3. Media or anecdotal reports of cancer clusters around mobile phone base stations have heightened public concern. WHO clarifies that over the past 15 years, studies examining a potential relationship between RF transmitters and cancer have been published. These studies have not yet provided evidence that RF exposure from the transmitters' increases risk of cancer. Likewise long term animal studies have not established an increased risk of cancer from exposure to RF fields, even at levels that are much higher than produced by base stations and wireless networks.
4. **According to a report by WHO, human and animal studies examining brain wave patterns, cognition and behavior after exposure to RF fields, such as those generated by mobile phones, have not identified adverse effects.** It is important to note that RF exposures used in these studies were about 1000 times higher than those associated with general public exposure from base stations or wireless networks. (Ref. WHO Fact Sheet No. Fact sheet N°304 May 2006)

II) RESEARCH AND STUDY

1. According to EUROPEAN COMMISSION EXPERT GROUP "Overall, the existing scientific literature encompassing toxicology, epidemiology and other data relevant to health risk assessment, while providing useful information, provides no convincing evidence that the use of radiotelephones or other radio systems, whether analogue or digital, poses a long-term public health hazard."
2. BRITISH MEDICAL ASSOCIATION states "**There are no definite adverse health effects from mobile phones or their base stations.**"
3. THE HEALTH COUNCIL OF THE NETHERLANDS concluded that the chance of health problems occurring among people living and working below base stations as a result of exposure to electromagnetic fields originating from the antennas is, in the Committee's opinion, negligible. The field strengths are always considerably less than the exposure limits. On the basis of the present data, the



Committee concludes that the occurrence of health problems at exposure levels associated with the use of mobile phones is unlikely. It is considered virtually impossible that the low field strengths in the vicinity of base stations give rise to changes in cognitive functions.

4. SWEDISH RADIATION PROTECTION INSTITUTE clarifies **“in many cases where the general public has shown concern, radiation intensity has proved to be less than a thousandth of the permitted level”**. To summarize, mobile telecommunications base stations do not constitute a risk regarding radiation protection.
5. In a study by INTERNATIONAL COMMISSION IN NON IONIZING RADIATION PROTECTION (ICNIRP) it was concluded that **Epidemiological studies on exposed workers and the general public have shown no major health effects associated with typical exposure environments.**

It may be submitted that each service provider has established necessary infrastructure for self- monitoring , self-testing and for auditing of EMF measurement for complying with emission limits as per ICNIRP guidelines as mandated by the license conditions. Independent Studies were carried by IIT Madras and Thiagarajar College of Engineering, Madurai to check the compliance with the ICNIRP limit for various locations in Delhi, Mumbai and Pune. A team of experts from the above mentioned institutions had measured 180 locations in Delhi, to assert the effect of cumulative emissions and found out that they were far below the prescribed ICNIRP limits.

Prof. Girish seems to undo whatever the industry has been doing so far to minimize the ubiquitous myths associated with EMF radiations from cellular towers. His comments on the other hand lack substantial evidence to justify the rationale behind the statements made. The comments of the stakeholder are more biased than rational and may create unnecessary scare. It should be understood that matters of grave sensitivity like this should be treated diligently and thus it is highly imperative that for all the issues raised by the stakeholder there need to be sufficient scientific evidence and facts.
