



India's experiences with lowering base station exposure limits below the ICNIRP guidelines

In 2008, the Indian Government adopted the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines for RF exposure, in line with the advice of the World Health Organization (WHO). The WHO has stated that there is no convincing scientific evidence that the weak RF signals from base stations and wireless networks cause adverse health effects.¹

With effect from September 2012, out of "abundant caution" the Indian Government lowered the RF exposure levels for base stations to 1/10th of ICNIRP guidelines and recently the Department of Telecommunications (DoT) submitted a paper to the International Telecommunication Union outlining their experiences with these lower limits².

They have acknowledged the technical difficulties caused by these changes in limits, including the fact that compliance distances (areas not accessible to the public around base stations) have increased by more than 200%, which has often resulted in access restrictions extending into nearby buildings. As this is not a workable solution, operators have had to reduce the output power of the base stations or to increase the height of the antennas to make the compliance area manageable.

Reducing the output power of base stations has led to further difficulties such as coverage gaps, meaning that additional base stations have been needed to fill in these gaps. Raising the height of antennas has created interference with nearby sites, necessitating changes, which has also negatively impacted coverage. The sharing of sites has become more difficult as the compliance boundaries of each antenna overlap with each other, thus making it difficult to comply with the more restrictive limits.

India's DoT has admitted that these changes have led to reductions in the quality of service for consumers, as well as an overall increase in the level of public concern. The DoT has also pointed out that local resident organizations have called for base stations to be removed even where they are fully compliant with the new limits. These experiences are in line with those seen in other countries, which have adopted precautionary limits without a scientific rationale.

The Indian experience would appear to represent an abject failure of policy that has resulted in increased concerns for the public, lower quality of service for consumers and increased costs of providing the service with no discernible benefits or any measurable improvement in safety.

¹ <http://www.who.int/peh-emf/publications/facts/fs304/en/index.html>

² India "Issues in implementation of new Electro Magnetic Field Emission norms with 1/10th of ICNIRP norms" ITU-T SG5 ITU Telecommunication Standardization Sector Study Group 5, October 2013
<http://www.itu.int/md/T13-SG05-C-0097/en>

The industry has long supported the WHO recommendation that countries adopt the science-based standards of either ICNIRP or IEEE since both standards are effectively harmonized and provide a high level of protection for all members of the community. Such an approach also avoids the type of problems experienced in India, which result from arbitrary reductions in the limits made for political rather than scientific reasons.³ The MMF continues to urge the Indian DoT to reconsider their decision and to apply exposure limits based on ICNIRP guidelines.

November 2013

³ For additional information see:

<http://www.mmfa.org/public/docs/eng/MMF%5FGSMA%5FImplications%20of%20Lower%20Limits%2Epdf>