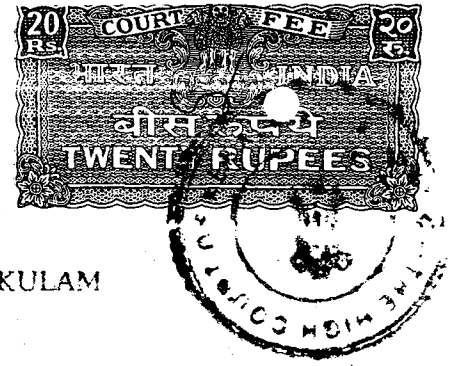


2006(4)
KLT 695



IN THE HIGH COURT OF KERALA AT ERNAKULAM

PRESENT :

THE HONOURABLE MR. JUSTICE K.S.RADHAKRISHNAN

&

THE HONOURABLE MR. JUSTICE K.PADMANABHAN NAIR

THURSDAY, THE 12TH OCTOBER 2006 / 20TH ASWINA 1928

WP(C).No. 18242 of 2006(V)

PETITIONER:

RELIANCE INFOCOM LTD., A AND P ARCADE,
SAHODARAN AYYAPPAN ROAD, KADAVANTHARA,
REPRESENTED BY ITS CIRCLE MANAGER (LEGAL),
AND AUTHORISED SIGNATORY V.K.SAJITH.

BY ADV. SRI.V.G.ARUN

RESPONDENTS:

1. THE CHEMANCHERY GRAMA PANCHAYAT,
CHEMANCHERY, KOZHIKODE REPRESENTED BY
ITS SPECIAL GRADE SECRETARY.
2. THE SPECIAL GRADE SECRETARY,
CHEMANCHERY GRAMA PANCHAYAT, CHEMANCHERY,
KOZHIKODE.
3. ANEESH, SON OF KUTTIRAMAN,
KAITHAVALAPPIL, VENGALAM P.O.,
ELATHUR (VIA), KOZHIKODE.
4. RAJESH, SON OF KUTTIRAMAN, DO. DO.
5. VINOD.P.K., SON OF LATE KUNHIKANNAN,
VENGALAM P.O., ELATHUR VIA, KOZHIKODE.

R1 & R2 BY ADV. SRI.K.A.SALIL NARAYANAN
R3 TO R5 BY ADV. SRI.P.V.KUNHIKRISHNAN

THIS WRIT PETITION (CIVIL) HAVING BEEN FINALLY HEARD
ON 22/09/2006, ALONG WITH WPC NO. 16724 OF 2006 THE COURT
ON 12/10/2006 DELIVERED THE FOLLOWING:

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K.S. RADHAKRISHNAN & K.PADMANABHAN

WP(C). Nos. 18242 & 16724 of 2006

Dated this the 12th day of October, 2006

J U D G M E N T

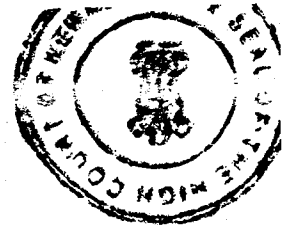
Radhakrishnan, J.

Use of mobile phone is a common phenomena throughout the country and has made drastic changes in the peoples' life style. Users range from a common man to a multimillionaire and this tiny instrument has revolutionized the medium of communication throughout the world. Constant use of mobile phone, it is reported, may have its own adverse ill effects on human health as well. Mobile phones produce radio-frequency. Magnetic energy moving through space is generally called radio frequency electro magnetic radiation (EMR). EMR is ofcourse a part of everyday life. EMR is emitted by natural sources like the sun, the earth and the ionosphere and also by artificial sources such as electrical and electronic equipments, radar facilities, broadcast towers and mobile phone base stations etc. EMR absorbed in human body is measured in units called the specific absorption rate (SAR) which is usually expressed in units of watts per kilogram (w/kg.) or milliwatts per gram (mw/g). There are multiple sources of exposures to electromagnetic fields including radio, FM radio, Television and other household gadgets. Exposure standards for Radio Frequency Energy has been developed by various countries and



organizations. Based on these scientific data, the National Council for Radiation Protection and Measurement of USA and the Australian Communication Authority urges a public exposure limit of 200 microwatts per square centimetre in the 30 to 300 MHz range. Direct use of mobile phones including radio, FM radio, Television and other household gadgets would have some illeffects on human beings. A workshop conducted by World Health Organization (WHO) in Prague in 2004 reached the following conclusions, viz., that (1) reported symptoms are very unspecific and could have other causes; (2) there is no casual association demonstrated between exposure and symptoms; (3) that patients who display those symptoms should be medically examined for alternative explanations and causes including psychiatric/psychological ones and other environmental factors; (4) lowering the safety limits for handset radiation (SAR levels) will not affect the situation. Study conducted would show that there is no scientific evidence for a causal relationship between the reported clusters of symptoms and exposure to microwave radiation used in cell phones, well below the safety standards.

2. Question that is posed for consideration in this case is not with regard to ill-effects of the use of mobile phones but whether installation of mobile base station and its functioning would cause any health hazards to the people who are residing nearby. Apprehension has also been voiced that radiation emanating from large telecommunication towers would



cancer, embryo disruption and changes in DNA structure. The above issue came up for consideration before a Division Bench of the Bombay High Court in WP No. 2112 of 2004. The Bench directed the Ministry of Health and Family Welfare, Government of India to conduct a scientific study on the issue. The Ministry of Health and Family Welfare on the direction of the Bombay High Court constituted a Committee under the Chairmanship of Dr.N.K.Ganguly, DG ICMR to evaluate the following aspects:

1. Whether it is advisable to frame and/or adopt international guidelines pertaining to installation of Base Stations by mobile telephone service providers, so as to avoid any potential risk to health and safety to public at large.
2. Explore the possibility for studying the course of action and framing a research project.

The Committee after extensive discussions and deliberations expressed the following remarks.

*There are multiple sources of exposures to electromagnetic fields including radio, FM radio, Television and other household gadgets. There is a need to acknowledge the confounding effects on these sources of RF.

*There are different types of Mobile Base Stations depending on the requirements of a particular system (GSM or CDMA) prevalent in India, however GSM system outnumbers CDMA.

*RF exposures from Mobile Base Stations are much less than from radio, FM radio and television transmissions.

*The height of Mobile Base Station antennae is nominally 36 metres and the effect of radio waves depends on the distance from the base stations since the antennae are directed horizontally with a 5 degree downwards tilt.



*The strength of radio frequency fields in front of the antennae varies with the distance. Persons standing directly in front of the antennae in these high density zones will get higher exposures.

*There are two main types of effects of electromagnetic waves: thermal and non-thermal which includes electrophysiological behavioural effects. These can be sleep disorders, cognitive disorders, memory disturbances, hearing disorders, etc.

*Factors like urbanization, siting of base stations, distance from the towers, existence of multiple towers and multiple providers, etc. all may have confounding effects which could be difficult to quantify.

*Subjective symptoms such as sleep disorders, cognitive disorders, memory disturbances, hearing disorders, etc. have been reported. However, the three completed human studies pertaining to base stations conducted by Santini R et al (2002), Bortkiewicz et al (2004) & Hutter & Kundi et al (2006) do not report any quantitative parameters related to health hazards.

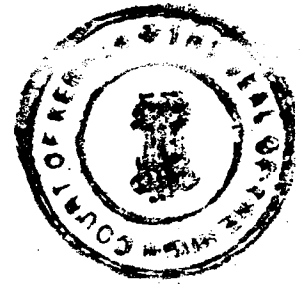
*ICNIRP Guidelines in respect of restriction on Specific Absorption Rate (SAR) are available internationally and have been adopted by various European countries, such as UK, Australia, Malaysia and Korea. But China has adopted more stringent criteria.

*Various studies conducted across the world on RF from Mobile Base Stations have shown that the exposures are of a such lower magnitude than the internationally accepted levels.

*At the moment there is no concrete evidence of any health hazard and WHO has the same opinion as mentioned in the latest Fact Sheet modified in May 2006. The Committee felt that more objective research is needed in the above disorders to quantify the effect on human health.

*WHO in its Fact Sheet No.304 regarding EMF in relation to Base Stations and wireless technology which has been updated in May 2006 recommends "National Authorities should adopt international standards to protect their citizens against adverse levels of RF fields".

*Taking the above mentioned into account, the Committee opined that overall there is not enough evidence to show direct health effects of RF exposures from Mobile Base Stations.



The Committee on the basis of the above findings recommended that a precautionary approach should be adopted till further research data is available. Further it was also opined that it will not be amiss to adopt the ICNIRP Guide lines for limiting EMF Exposure. Committee also reported that the protocols to be allowed and necessary guidelines for siting of mobile phone base stations may need to be developed as per its applicability for India. Further it was also recommended that periodic review of the status of knowledge in this area should be done and the recommendations may be revised accordingly. Committee however, opined that there is not enough evidence to show any direct health hazards of RF exposure from Mobile Base Stations. Recognizing that, committee has however opined, that data be generated through appropriate epidemiological studies (covering urban/rural population & varied exposure levels) and appropriate funds should be made available to the Institutions conducting these studies.

3. Report submitted before the Bombay High Court was made available by Shri Santhosh Mathew, Advocate which gave us considerable scientific insight for resolving the problem posed before us. Petitioner has also stated that the experiments conducted in and around BTS towers at points where the public is likely to be exposed has proven that emission at these points are 150,000 times below the level at which significant heating can occur. Petitioner has also produced a chart showing a comparison



stated that 200 microwatts is the safe exposure limit set by different regulatory bodies. Petitioner has made a comparison of power density (microwatts/sq.cm.) between AM Radio, FM Radio, Mobile Base Station, UHF TV, VHF TV, Paging services etc. and submitted that radiation from the Mobile Base Station is less compared to that of AM Radio and FM Radio. Atomic Energy Regulatory Board also submitted a report before the Bombay High Court in WP. No. 2112 of 2004. Report states that radio frequency waves used for mobile phones are not covered under the definition of "radiation" as given in the Atomic Energy Act, 1962 and non ionizing radiations do not have the capability to ionize the matter with which they interact. Radiation Protection Division (NRPB) of the U.K. Health Protection Agency in the year 2000 has reported that the balance of evidence indicates that there is no general risk to the health of people living near the base stations on the basis that exposures are expected to be small fractions of guidelines. Scientific data made available to the court would indicate that the use of mobile phone, AM Radio, FM Radio etc. is more harmful to the human beings compared to the power emission from the Base Transcieving Stations and that of Mobile Towers. Surveys conducted in proximity to base stations indicate that the public is exposed to extremely low intensity RF fields in the environment and all the evidence indicates that they are unlikely to pose a risk to health. We may in this connection also refer to the order of the Delhi High Court in OS. 1121/02 wherein the court opined that so far there is neither any conclusive



research nor authoritative scientific evidence to show that the radiations emitted by such Transmission Towers are dangerous to the health of human beings

4. Petitioner is a company engaged in providing telecommunication and related services to the general public. The Ministry of Communication, Department of Telecommunication, Government of India under section 4 of the Indian Telegraph Act, 1885 has awarded a licence to the petitioner to provide basic telephone services in Kerala by virtue of which the petitioner can establish, install, operate and maintain basic telephone services on a non-exclusive basis in the service area of the Kerala Telecom Circle. Ext.P1 is the licence granted to the petitioner. In order to provide service petitioner has to establish large number of microwave installations and Base Transceiving Stations in various parts of Kerala. Such stations are essential for transmitting the receiving signals installed and maintained by all telecom service providers. To install such tower petitioner has entered into a lease agreement with a private party and as per terms of the agreement petitioner has taken on lease 3.26 cents of land in re-survey No. 29/3 and 29/6 of the Vengalam Village, Koyilandy Taluk in Kozhikode District. Petitioner then submitted the plan for the BTS before the Chemancherry Panchayat for approval. Plan was approved by the Panchayat and the petitioner was issued a building permit on 20-3-2006. When the petitioner started preparation for constructing the tower, certain local people raised objection. Petitioner filed a complaint before the police



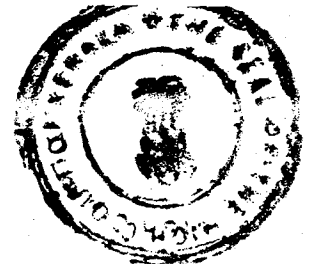
and then preferred WP(C). 16724 of 2006 seeking police protection for carrying out the construction work and this court granted interim police protection. Panchayat later acting on a complaint received from the local residents cancelled the permit issued to the petitioner apprehending that installation of the diesel generators would cause sound pollution and that the radiation from the Tower would likely to pose health hazards. Petitioner was served with Ext.P6 letter dated 14-6-06 by which petitioner was directed to stop further construction of the tower. Aggrieved by the same petitioner has filed WP(C). No. 18242 of 2006.

5. We have already found that RF exposures from Mobile Base Stations are much less than from radio, FM radio and television transmissions and that the consensus of scientific community is that the radiation from Mobile Phone Base Stations is far too low to produce health hazards if people are kept away from direct access to the antenna and the overall evidence indicates that they are unlikely to pose a risk to health. The strength of radio frequency fields in front of the antennae varies with the distance. Persons standing directly in front of the antennae in these high density zones will get higher exposures. We have also found that the height of Mobile Base Station antennae is normally 36 metres and the effect of radio waves depends on the distance from the base stations since the antennae are directed horizontally with a 5 degree downwards tilt. Human studies pertaining to base stations conducted by Santini R et al (2002), Bortkiewicz et al (2004) & Hutter & kundi et al (2006) do not report



any quantitative parameters related to health hazards. Therefore it can safely be concluded that the permission granted for installation of Mobile Base Station by the Panchayat would not cause as such any health hazards nor will it affect the fundamental rights guaranteed to citizens under Article 21 of the Constitution. Right to life enshrined under Article 21 includes all those aspects of life which make life meaningful, complex and worth living. Development of technology has its own ill-effects on human beings, but, at times people will have to put up with that at the cost of their advantages. Petitioner and others for installing towers will have necessarily to comply with the statutory provisions contained in Chapter XIX of the Kerala Municipal Building Rules, 1999 which permits construction of telecommunication towers over buildings. Petitioner has submitted that it has already satisfied all those conditions and in such circumstance Panchayat has granted the licence.

6. Petitioner has the privilege of getting a licence under the provisions of Indian Telegraph Act. Licence agreement specifically says that the licence shall be governed by the provisions of Indian Telegraph Act, 1885, Indian Wireless Telegraphy Act, 1933 and Telecom Regulatory Authority of India Act, 1997 as modified or replaced from time to time. Clause 2.2(d)(i) says that the licensee is permitted to provide service by utilizing any type of network equipment, including circuit and/or packet switches, that meet the relevant International Telecommunication Union



standardization bodies such as 3GPP/3GPP-2/ETSI/ETF/ANSI/EIA/TIA/IS.

Petitioner has therefore necessarily to comply with those standards.

7. The Telecom Regulatory Authority of India Act, 1997 has constituted the Telecom Regulatory Authority. Section 11 of the Act deals with powers and functions of the authority. Section 12 confers power on the authority to call for information, conduct investigations etc. Clause 9.1 of Ext.P7 obliges the licensee to furnish to the Licensor/TRAI, on demand in the manner and as per the time framed such documents, accounts, estimates, returns, reports or other information in accordance with the rules/orders as may be prescribed from time to time. Licensee shall also submit information to TRAI as per any order or direction or regulation issued from time to time under the provisions of TRAI Act, 1997 or an amended or modified statute. Clause 10 of Ext.P7 enables the authority to suspend, revoke or terminate the licence of the petitioner. Clause 16.2 states that all disputes relating to the licence will be subject to jurisdiction of Telecom Disputes Settlement and Appellate Tribunal (TDSAT) as per provisions of TRAI Act, 1997 including any amendment or modification thereof.

8. We notice that the Panchayat has as on today no scientific data or relevant materials to cancel the licence already granted on the ground that the installation of the Tower would cause any health hazards. Licence granted has been cancelled by the Panchayat based on an apprehension that the radiation may cause health hazards to the people of the locality.



Further Ext.P5 also says that installation of generator would cause sound pollution. Petitioner has not installed any generator as on today and if the installation of generator would cause any sound pollution, evidently Pollution Control Board can give appropriate direction and the petitioner will have to obtain necessary consent from the Pollution Control Board for installation of generators, so that it would not cause any sound pollution. So also, if the installation of Tower and the emission of electromagnetic waves causes any air pollution, affecting human health the Pollution Control Board can take appropriate measures under Air (Prevention and Control of Pollution) Act, 1991.

9. Counsel appearing for the Panchayat submitted that if the petitioner is aggrieved, the remedy open to the petitioner is to file an appeal under section 276 of the Panchayat Raj Act. We have no reason to think that the Panchayat had not taken into consideration all aspects of the matter before granting licence. Licence was cancelled not based on any scientific data that the installation of Base Station would cause any health hazards to the people of the locality but on the mere apprehension, that it would, which in the facts and circumstances, cannot be sustained in the absence of any scientific data. Considering the facts and circumstances of these cases we are however inclined to give a general direction to the TRAI to make periodical inspection to ascertain whether radiation emanated from the Mobile Base Stations would cause any health hazards to the people of the locality.

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WP(C). 18242/06

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10. We are therefore inclined to allow WP(C). 18242 of 2006 and quash Exts. P5 and P6 orders and there will be a direction to respondents 1 to 3 to give adequate and effective protection to the petitioner to install the tower in case any obstruction is caused by respondents 4 to 6 and their supporters

Writ petitions are disposed of as above.

Sd
K.S. RADHAKRISHNAN, JUDGE.

Sd
K.PADMANABHAN NAIR, JUDGE

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