

## Mobile phone masts and health concerns

Please find enclosed information on mobile phone masts and health concerns.

I am a member of the Electro Magnetic Fields Discussion Group (EMF-DG) which is chaired by Sir William Stewart, Chairman for the Health Protection Agency UK (HPA) the HPA are advisors to the UK Government. I was invited to give a presentation on mobile phone masts and health concerns at the Health Protection Agency, London on 16th October, 2006.

I am a founder member of Seriously Concerned Residents Against Masts (SCRAM), the EM Radiation Research Trust (RRT) and Human Ecological Social Economic (h.e.s.e.) UK.

The EM Radiation Research Trust (RRT) includes fellow trustees:

Mike Bell, Chair of the Trust and Devon based lawyer
Dr Ian Gibson, Labour MP - Originally a senior academic research biologist
Dr Gerard Hyland, Associate Fellow of Warwick University
Dr Caroline Lucas, Green Party MEP for South-East England
Andrew Mitchell, Conservative MP and Shadow Secretary of State for International Development
Mark Oaten, Liberal Democrat MP, concerned with Health and Environment issues
Brian Stein, Chief Executive Samworth Brothers Ltd. He suffers from EHS

Trustees have presented evidence at the UK and European Parliaments. We have attended private meetings with Director Generals and many MPs including:

European DG for Health and Consumer Products - Mr John Ryan UK Health Secretary - Rt Hon Patricia Hewitt MP UK Shadow Home Secretary - Rt Hon David Davis MP UK Solicitor General - Rt Hon Mike O'Brien MP

The RRT has presented at and attended many National and International conferences/public meetings, including the Benevento Conference and now networks worldwide with scientists, doctors and campaigners.

## Why I became involved - The T-Mobile Wishaw mast 1994-2003

In 2001 I was diagnosed with breast cancer age 38 after living 100m from a phone mast for over 7 years. The mast was also associated with health problems in many other people living in most of the other houses in the village.

The hamlet of Wishaw is a prime example:

http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2003/04/25/nmast25.xml

Five women developed breast cancer

One case of prostate cancer

One bladder cancer

One lung cancer

Three cases of pre-cancer cervical cells

One motor neurone disease age 51, who also had massive tumour removed from the top of his spine.

People have developed benign lumps

Electro-sensitivity

Three cases of severe skin rashes

Many villagers suffering with sleep problems, headaches, dizziness and low immune system problems. Horse with blood problems, continuous treatment needed by the vet.

Out of the eighteen houses surrounding the mast at up to a range of 500 metres, 77% of the tiny hamlet had health related illness believed to be as a result of radiation from the mast. The out break of illness occurred in 2001 after seven years of exposure to the radiation emitted by the T-Mobile mast. We are now in contact/communication with many people who claim to be suffering from this form of radiation throughout the UK and Europe.

One other important fact is that since the Wishaw Mast vanished on November 2003, many of the residents are reporting a restored feeling of well-being. The residents are reporting improvement in their sleep patterns and increased energy levels. The headaches and dizzy symptoms have disappeared. We have recently seen a baby boom with three babies born in the village. We have also seen a return of wildlife in the area and the horse has since recovered and is now strong and healthy and no longer needs treatment.

 $\underline{\text{http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2003/11/30/nmast30.xml\&sSheet=/news/2003/11/30/nmast30.xml\&sSheet=/news/2003/11/30/nmast30.xml\&sSheet=/news/2003/11/30/nmast30.xml&sSheet=/news/2003/11$ 

# Wales votes yes to phone mast planning shake-up, media release – 13th October, 2006

The National Assembly for Wales has accepted by a unanimous vote (41 to 0) the principle of full planning for phone masts, leaving England isolated as the only part of the UK where full planning for phone masts will not be required.

The report which was the subject of the vote put forward if fully implemented would give the people of Wales the greatest say on phone masts siting than anywhere else in the UK.

# **International Association of Fire Fighters**

IAFF oppose the use of fire stations as transmitter sites, because of the health problems of its members <a href="http://www.iaff.org/safe/content/celltower

T-Mobil in Germany commissioned ECOLOG to review over 220 pieces of peer reviewed and published papers and they found evidence for: Effects on the central nervous system, Cancer initiating and promoting effects, Impairments of certain brain functions, loss of memory and cognitive function. Ecolog called for the ICNIRP guidelines to be reduced immediately. The Ecolog report was released in the year 2000 the same year as the Stewart report which seemed to reach a different conclusion. However, the report was never translated into English until H.e.s.e. UK recently uncovered it six years later. This demonstrates the desperate need to release funding to translate further research that is available in Russian and German languages, it's unbelievable that in the 21<sup>st</sup> century important research not reviewed or taken into account due to language barriers.

At the same time there were reports of riots in Israel 14 March 2000 – residents rioted in Druse town of Usfiyeh . They claimed clusters of over 200 cancers related to antennas. Residents destroyed all phone masts by burning them, knocking them down and ripping out cables ICNIRP accused of peddling corrupt science paid by the mobile phone companies.

Israel- on 27 September 2006 - 200 people from the neighbourhood Neve Horesh, in Dimona, took their health and the law into their own hands, destroying phone mast equipment. Saying "It was about our children's lives."

This is not unique to Israel the same claims have been made in many other parts of the world and the UK has also seen a number of phone masts illegally removed.

Taiwan - nearly 900 masts were finally demolished in 2005. The operators spent a total of more than (US\$30.8 million) in dealing with such issues. This year, the total cost incurred is likely to rise to (US\$61.7 million), the operators estimate.

# The Courts are also delivering blows against mobile masts; the most recent ruling cites public health risk.

Ten mobile telephone antennas must be removed as they pose a threat to public health, the Athens Appeals Court ruled on 18/7/2006. In justifying its ruling, the court cited "urgent concerns regarding the protection of public health."

UK campaign groups have been working with retired physicist Dr John Walker. Six studies now show an increase in serious illness appearing in radiation from masts after long-term exposure. Dr John Walker's research clearly shows the clusters of illness appear in radiation at exposures of around 1.5v/m, which is below the guidelines significantly permitting around 40 to 50 v/m (varying according to microwave frequency). We believe the increase will be approx 10 to 12 per cent within concentrated areas see examples at-: <a href="http://www.starweave.com/gallery/">http://www.starweave.com/gallery/</a>. This situation demands proper and full investigation.

Germany reports a 7 fold increase in breast cancer in an area with cellular antennas. A report on 21/9/2006 the head of cancer registry in Berlin, Roland Stabenow informed the residents that there is an increase of 7 fold in breast cancer in their area (an area with cellular antennas). The attention was drawn after a map was prepared by the residents and the cancer cases are near the antennas.

# Can people throughout the world be wrong? Let's look at what the science and doctors are reporting:

The REFLEX project was set up to investigate the effects of low-levels of RF radiation on cellular systems; cost of approximately \$3 million. The work was carried out by 12 research groups in seven European countries.

They concluded that in-vitro damage is real and that it is important to carry out much more research, especially monitoring the long-term health of people.

One thing demonstrated was that low-power RF radiation could increase the number of DNA breaks in exposed cells and could also activate a stress response with the production of heat-shock proteins. It was clear chromosome damage could be seen in the cell exposed to **mobile phone radiation over 24 hour's** exposure at SAR level 1.3W/kg, ICNIRP/WHO level = 2W/kg, similar chromosome damage can be seen in the cell exposed to irradiation equal to 1600 chest x-rays. The image can be viewed on my powerpoint presentation slide number 16 which is on the front page of the Radiation Research Trust website **www.radiationresearch.org.** 

A German study by a team of local medical doctors in Naila with data from over 10 years, discovered a threefold increase in new malignancies in people living up to 400m from a mast after five years exposure when compared to people living further away in the same town.

GP records of c.1000 patients over the period 1994-2004 Cellular transmitting site first started operating in 1993. In the period 1999-2004, the RR=3.1 adjusted for age and gender for newly diagnosed tumours.

Eger H, et al, 2004, The Influence of Being Physically Near to a Cell Phone Transmission Mast on the Incidence of Cancer, Umwelt-Medizin-Gesellschaft 17.4.2004

## Natanya, Israel

A small study by GP's at the Kaplan Medical Centre, Israel, discovered a <u>fourfold</u> increase in cancer within 350m after long term exposure to a phone mast and a TENFOLD increase specifically in women. Wolf D & Wolf D, 2004, Increase of Cancer near Cell-Phone Transmitter Station, Intanational Journal of Cancer Prevention 1-2, April 2004.

## Medical Doctors are also campaigning for precaution.

Finland: Helsinki Appeal 2005

http://www.emrpolicy.org/news/headlines/helsinki appeal 05.pdf

The Helsinki Appeal 2005 from EMF Team Finland calls on the European Parliament to act promptly for

the adoption of the new safety standard in the European Union. Physicians and researchers, feel great concern about the Precautionary Principle not being sufficiently applied to electromagnetic fields. They want the standards recommended by ICNIRP to be rejected, because recent scientific studies report various disturbances caused by mobile phone and other RF radiation. They also appeal to the European Community to take prompt measures for solving the refunding of the REFLEX project, which showed evidence of genotoxic effects of mobile phone radiation and should be continued:

#### http://www.emrpolicy.org/

The Irish Doctors' Environmental Association believes that a sub-group of the population are particularly sensitive to exposure to different types of electro-magnetic radiation. The safe levels currently advised for exposure to this non-ionising radiation are based solely on its thermal effects. However, it is clear that this radiation also has non-thermal effects, which need to be taken into consideration when setting these safe levels. The electro-sensitivity experienced by some people results in a variety of distressing symptoms which must also be taken into account when setting safe levels for exposure to non-ionising radiation and when planning the siting of masts and transmitters.

Catania Resolution September 13-14, 2002, 16 world leading scientists at the International Conference State of the Research on Electromagnetic Fields, Scientific and Legal Issues, by ISPESL\*, the University of Vienna, and the City of Catania, held in Catania (Italy) on September, 2002,

# Thirty GPs in Liverpool

 $\underline{\text{http://icliverpool.icnetwork.co.uk/0100news/0100regionalnews/tm\_objectid=13656858\&method=full\&sited} = \underline{\text{bid=50061-name\_page.html}}$ 

It was reported in the Liverpool Echo on November 2003 "bad medicine". A group of thirty, hospital doctors and consultants have signed a petition over the installation of a mast which they believe is a risk to health.

## The Freiburger Appeal (2002)

http://www.laleva.cc/environment/freiburger appeal.html

An important appeal from German doctors and other health professionals, reporting an increase in observed cases of:

Learning, concentration, and behavioural disorders

Headaches, migraines, nervous and connective tissue pains

Sleeplessness, daytime sleepiness, chronic exhaustion

Extreme fluctuations in blood pressure, hard to influence with medication

Heart rhythm disorders

Brain-degenerative diseases and epilepsy

Cancerous afflictions: leukemia, brain tumors

After carefully-directed inquiry they found a clear temporal and spatial correlation between the appearance of disease and exposure to pulsed high-frequency microwave radiation from mobile phone masts, mobile and DECT phone use.

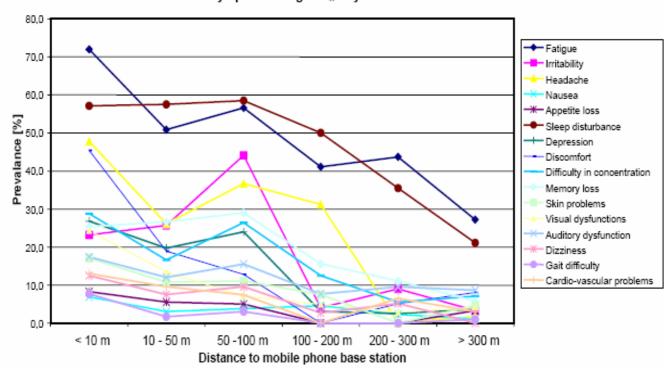
Furthermore, the Russians, Chinese and many other parts of Europe are rejecting ICNIRP standards and are concerned about the biological effects. The Ministry of Chinese Health revealed that in the last ten years studies on radiation similar to that emitted by the mobile phone industry have shown a majority of results are showing biological effects. Out of 154 studies, 88 or 57% have shown biological effects such as cancer, genetic molecular and cellular changes, electro physiology effects, behaviour changes etc. in a survey by Dr Henry Lai, Washington University, Seattle 2003. It said that the amount of evidence for biological effects and the characteristics of these are so alarming, that all efforts should be dedicated to find a way to minimize these effects.

China held an International Conference September 2005 in order to discuss and establish Asian Commission on Non-Ionizing Radiation Protection (ACNIRP). Research scientists have found that relatively low-level of RF (radio-frequency) radiation can lead to DNA breaks.

#### Santini (2002)

Take a look at the following graph and note trends in fall off of reported symptoms from masts ties in well with newer studies.

## Symptom Categorie "very often"



Santini (2002)

# La Nora, Mercia, Spain (2004) La Nora, Mercia, Spain (2004) (Kos report)

94 participants, (47m 47f) aged 14 to 81

Navarro E A, et al, 2003, The microwave syndrome: a preliminary study in Spain, Electromagnetic Biology & Medicine 22 (2 & 3) 161-169

Also: Oberfeld G, et al, 2004, The microwave syndrome – Further Aspect of a Spanish Study – International Conference Proceedings, Kos, Greece 2004

Age, sex and distance adjusted model - c.f. controls in less than 0.05 V/m					
	0.05-0.22 V/m		0.25-1.29 V/m		trend
	OR	(p)	OR	(p)	(p)
Depressive tendency	39.4	0.002	59.4	0.0003	0.0016
Fatigue	28.5	0.003	40.1	0.0009	0.0039
Sleeping disorder	10.4	0.002	10.6	0.0004	0.0008
Concentration problems	8.3	0.003	19.2	0.0000	0.0001
Headaches	6.0	0.01	6.1	0.004	0.0050
Unusual discomfort	4.3	0.03	10.9	0.0002	0.0007
Irritability	3.1	0.07	9.2	0.0002	0.0009
Memory problems	2.4	0.21	7.8	0.001	0.0031
Loss of appetite	6.7	0.12	27.5	0.003	0.0030
Nausea	5.9	0.13	12.8	0.021	0.0499
Visual disorder	2.5	0.18	5.8	0.005	0.0186
Dizziness	3.0	0.17	8.4	0.004	0.0117
Cardiovascular problems	9.4	0.06	17.9	0.011	0.0333

## Bamberg report 2005 (357 GP patients)

Description of symptom groups

**Group 1** no symptoms

Group 2 sleep disturbance, tiredness, depressive mood

**Group 3** headaches, restlessness, dazed state, irritability, disturbance of concentration, forgetfulness, learning difficulties, difficulty finding words

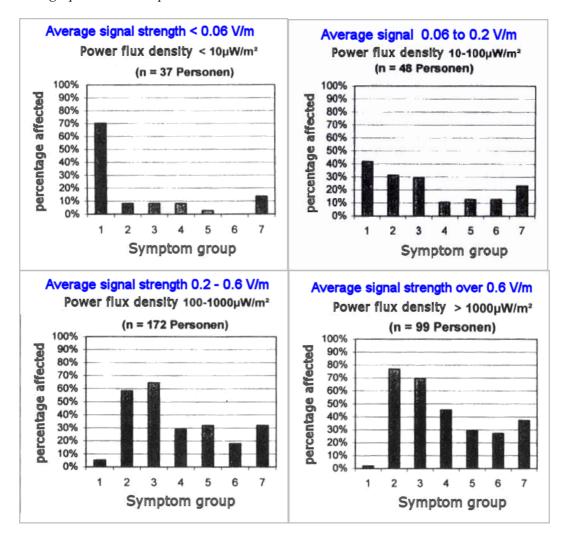
**Group 4** frequent infections, sinusitis, lymph node swellings, joint and limb pains, nerve and soft tissue pains, numbness or tingling, allergies

**Group 5** tinnitus, hearing loss, sudden hearing loss, giddiness, impaired balance, visual disturbances, eye inflammation, dry eyes

Group 6 tachycardia, episodic hypertension, collapse

**Group 7** Other symptoms: hormonal disturbances, thyroid disease, night sweats, frequent urge to urinate, weight increase, nausea, loss of appetite, nose bleeds, skin complaints, tumours, diabetes

Here are the graphs that accompanied their letter:



#### Hutter et al (2006)

365 participants in urban & rural areas near to 10 selected base stations (primarily 900 MHz GSM). Field strength was measured in 336 households. The control threshold of 0.2 V/m seems rather high and a high % of control participants reported symptoms.

Average power density W/m2	< 0.1	0.1-0.5	>0.5	
Average signal strength V/m	< 0.2	0.2-0.44	>0.44	p
Headaches	1.0	1.36	3.06	0.017
Difficulty to concentrate	1.0	1.32	2.55	0.035
cold hands or feet	1.0	1.03	2.57	0.019
tremor	1.0	0.68	2.37	0.062
loss of appetite	1.0	1.24	2.40	0.069

Conclusion: As a precautionary measure, siting of base stations should be such as to minimise exposure of neighbours.

Hutter H-P et al, 2006, Subjective symptoms, sleeping problems, and cognitive performance in subjects living near mobile phone base stations, Occup Environ Med 2006;63:307–313

## Egypt (Abdel-Rassoul 2006)

Exposed (N = 85) c.f. Controls (N = 80)					
Neurological complaints	RR	p			
Headache	2.77 [1.06–7.4]	<0.05			
Memory changes	7.48 [2.29–26.98]	<0.001			
Tremors	8 (* no controls)	<0.01-			
Dizziness	4.41 [1.29–16.46]	<0.01			
Depressive symptoms	2.8 [1.02–7.94]	<0.05			
Blurred vision	1.63 [0.69–3.91]	>0.05			
Sleep disturbance	2.77 [1.06–7.4]	<0.05			
Irritability	1.48 [0.68-3.27]	>0.05			
Lack of concentration	1.77 [0.65-4.97]	>0.05			

Conclusions and recommendations: Inhabitants living nearby mobile phone base stations are at risk for developing neuro-psychiatric problems and some changes in the performance of neurobehavioral functions either by facilitation or inhibition.

Revision of standard guidelines for public exposure to RFR from mobile phone base station antennas and using regular assessments for the early detection of biological effects among inhabitants around the stations are recommended.

Abdel-Rassoul G et al, 2006, Neurobehavioral effects among inhabitants around mobile phone base stations, NeuroToxicology (in press; e-version available)

# Cyprus (Preece 2005)

Residents of Akrotiri, Asomatos and Pano Kyvides were included in this survey which measured RF exposure from all sources including military signals. In the two 'exposed' villages most areas GSM mobile phone mast signals dominated (up to 1.4 V/m) while the 17.6 MHz military signals were up to 0.3 V/m. Average readings were less than half these values. The corresponding readings in the control village were <0.01 V/m. There was no excess of cancer, birth defects or obstetric problems. There was heightened risk perception and a considerable excess of migraine, headache and dizziness, which appears to share a gradient with RF exposure. The increased Odds Ratios are shown below.

Condition	Akro (%)	otiri OR	Ason (%)	oatos OR	Pano K (%)	vvides OR	P value
Migraine	23.1	2.73	14.8	(2.73)	9.9	1.0	.000
Headache	51.3	3.69	35.1	1.89	22.2	1.0	.000
Dizziness	35.7	5.7	20.9	2.47	10.2	1.0	.000
Depression	10.2	2.95	9.7	2.5	3.9	1.0	.002

The estimates of the numbers of people living in each village were: 800 in Akrotiri, 350 in Asomatos and 1000 in Pano Kyvides. Questionnaires were distributed to all households, with an overall response rate of 87%.

Preece AW, et al, 2005, The Akrotiri Military Antennae Survey Report. Updated figures and paper are now submitted for a new publication

## **Current Guidance levels**

1800 MHz Public Exposure Guidelines		Equivalent
	uW/m2	V/m
NRPB prior to IEGMP (Stewart) Report	100 000 000	194
ICNIRP (1998), WHO	9 000 000	58
Belgium (ex Wallonia)	1 115 000	21
Italy (sum of frequencies)	100 000	6
Russia, PRChina	100 000	6
Switzerland, Lichtenstein, Luxembourg	95 000	6
Belgium Wallonia	24 000	3
Wien (sum GSM)	10 000	1.9
Italy (single frequency)	1 000	0.6
Salzburg 1998 (sum GSM)	1 000	0.6
EU-Parl, GD Wissenschaft, STOA GSM (2001)	100	0.2
Salzburg GSM/3G outside houses (2002)	10	0.06
Salzburg GSM/3G inside houses (2002)	1	0.02
Bürgerforum BRD proposal, waking areas (1999)	1	0.02
Bürgerforum BRD proposal, sleeping areas (1999)	0.01	0.002
Mobile phone handsets can work down to about	0.000 002	0.000 03

The UK adopted the guidelines set by the International Commission on Non-Ionising Radiation Protection 'ICNIRP'. However, the ICNIRP standard does not offer any form of protection other than from the heating effects of microwave radiation 'shocks and burns'. In other words ICNIRP only protects your body from properties of high levels of elevated temperatures. A very substantial body of peer reviewed science clearly shows many biological changes have already happened. ICNIRP does not cover long term exposure.

## **Benevento Resolution 2006**

## www.icems.eu/resolution.htm

The International Commission for Electromagnetic Safety (ICEMS) held an international conference entitled "The Precautionary EMF Approach: Rationale, Legislation and Implementation", hosted by the City of Benevento, Italy, in February 2006. The meeting was dedicated to W. Ross Adey, M.D. (1922-2004). The scientists at the conference endorsed and extended the 2002 Catania Resolution and resolved that, among other things:

More evidence has accumulated suggesting that there are adverse health effects from occupational and public exposures to electric, magnetic and electromagnetic fields at current exposure levels. What is needed is a comprehensive, independent and transparent examination of the evidence pointing to this emerging, potential public health issue.

Resources for such an assessment are grossly inadequate despite the explosive growth of technologies for wireless communications as well as the huge ongoing investment in power transmission.

Arguments that weak (low intensity) EMF cannot affect biological systems do not represent the current spectrum of scientific opinion.

To encourage governments to adopt a framework of guidelines for public and occupational EMF exposure that reflect the Precautionary Principle - as some nations have already done.

## It is not just humans who are affected - Valladoid, Spain, White Storks Study 2005

Number of young per couple for nests within 200m of the antenna was 0.86 (0.7 - 1.02) p=0.001 whereas productivity for nests further than 300m away was 1.6 (1.46 - 1.74) p = 0.001 40% of those nesting within 200m had no chicks, whereas only 3.3% of those further than 300m did not have chicks.

The white stork behavior recorded within 200m included:

The couple frequently fight over the sticks
The sticks fall to the ground when trying to build the nest
The most affected nests never get built
Frequent death of young chicks in their early stages

Balmori A, 2005, Possible Effects of Electromagnetic Fields from Phone Masts on a Population of White Stork, Electromagnetic Biology and Medicine, 24:109–119.

Loscher and Kas of Universities of Hannover Veterinary School and University of the German Army in Munich 1998.

A study funded by the Bavarian State Government in Germany following reported adverse health effects in dairy cattle after a Telecoms Mast had been erected. There was a significant drop in the milk yield of that herd of cattle and Extraordinary Behaviour Disorders in some of the cows related to the microwave transmissions from that Mast. When the cattle were moved away from its vicinity after a period the milk yield and the behaviour of that herd was totally restored to normal. However, when the cattle were returned to the mast environment their symptoms returned.

The effects of EMR are being felt by wildlife and the environment as a whole, Birds, bees, worms, trees are all being affected. We need to fight for not only the future of mankind but for the future of the whole environment.

#### Children Act 1989 Part 3 Section 17

Places a legal obligation on Local Authorities to protect children in their area against significant harm and or abuse or the risk of. The Children Act stands apart from other legislation in so much as the risk of harm does not have to be proven or to have taken place, but could be a likelihood or perceived risk.

UK and EU precautionary understanding The EC and UK Precautionary Principle

"The precautionary principle covers cases where the scientific evidence is insufficient, inconclusive or uncertain, but where there is some indication of reasonable grounds for concern of adverse effects on the environment or health. The precautionary principle provides a basis for action when science is unable to give a clear answer."

Who is accountable? In the UK all agencies refer back to the Health Protection Agency for advice. The world looks towards the World Health Organisation (WHO) We urgently request that the HPA and WHO advise Governments and Authorities to adopt the precautionary principle for mobile phones/phone masts, DECT phones, microwave baby and security alarms and not to install wireless computer networks until safety is 'proved.'

The Government receives an estimated £10 billion a year in revenue from the mobile phone industry. Emergency Government funds should be released. Starting with at least £50 million in order to deal with translation of German and Russian research, an education programme, media campaign and funding released to Independent scientists to carry out further research.

The funds could be given to the EMF Discussion Group – Chaired by Sir William Stewart as it has a mixed group of experts with different views and opinions which leads to a healthy debate and should help avoid the continued criticism and mistrust from the public who have lost faith in the democratic process and blame discrepancy of funding for research.

The phone industry are un-elected officials who forcefully and undemocratically ignore the wishes and concerns of local communities.

In the words of - Dr Robert O. Becker – twice nominated for the Nobel Prize "I have no doubt in my mind that at the present time, the greatest polluting element in the earth's environment is the proliferation of electromagnetic fields. I consider that to be far greater on a global scale, than warming, and the increase in chemical elements in the environment."

Yours sincerely,

Mrs Eileen O'Connor Trustee – EM Radiation Research Trust

#### References:

EM Radiation Research Trust www.radiationresearch.org

Human Ecological Social Economic www.hese-project.org

Seriously Concerned Residents against Masts <a href="https://www.scram.uk.com">www.scram.uk.com</a>

#### **Taiwan**

http://www.digitimes.com/telecom/a20060316A9052.html

International Association of Fire Fighters <a href="http://www.iaff.org/safe/content/celltower/celltowerfinal.htm">http://www.iaff.org/safe/content/celltowerfinal.htm</a>

ECOLOG report (2000) -T-Mobil in Germany
Mobile Telecommunications and Health
Review of Scientific Research
In view of Precautionary Health Protection
Commissioned by T-Mobil, DeTeMobil Deutsche Telekom MobilNet GmbH
Authors, Dr. Kerstin Hennies, Dr. H.-Peter Neitzke
Dr. Hartmut Voigt, with the support of Dr. Gisa-Kahle Anders
http://www.ecolog-institut.de/index.php?id=49&no\_cache=1&sword\_list[]=T-Mobil

#### Reflex

http://www.verum-

foundation.de/www2004/html/pdf/euprojekte01/REFLEX Final%20Report Part%201.pdf

Natanya, Israel study at the Kaplan Medical Centre by GPs

Wolf D & Wolf D, 2004, Increase of Cancer near Cell-Phone Transmitter Station, Intanational Journal of Cancer Prevention 1-2, April 2004.

Finland: Helsinki Appeal 2005

http://www.emrpolicy.org/news/headlines/helsinki appeal 05.pdf

The Irish Doctors' Environmental Association (IDEA) <a href="http://www.ideaireland.org/emririshresearch.htm">http://www.ideaireland.org/emririshresearch.htm</a>

## Freiburger:

http://www.laleva.cc/environment/freiburger appeal.html

Learning, concentration, and behavioural disorders, headaches, migraines, nervous and connective tissue pains, sleeplessness, daytime sleepiness, chronic exhaustion

Eger H, et al, 2004, The Influence of Being Physically Near to a Cell Phone Transmission Mast on the Incidence of Cancer, Umwelt-Medizin-Gesellschaft 17.4.2004

Catania Resolution September 13-14, 2002

#### Santini:

Santini et al (Paris) [Pathologie Biologie (Paris)] 2002

http://www.emrnetwork.org/position/santini hearing march6 02.pdf

Sleep problems Fatigue Headache Nausea irritability Memory loss Concentration difficulty Depression

<u>The Microwave Syndrome – Further Aspect of a Spanish Study – Oberfeld Gerd. Press International</u> Conference in Kos (Greece), 2004

http://www.mindfully.org/Technology/2004/Microwave-Syndrome-Oberfeld1may04.htm

Navarro E A, et al, 2003, The microwave syndrome: a preliminary study in Spain, Electromagnetic Biology & Medicine 22 (2 & 3) 161-169

## Bamberg (July 2005) Dr. Cornelia Waldmann Selsam:

Sleep problems, fatigue, depression, headaches, dazed state/dizziness, concentration problems, memory problems, learning difficulties, headaches, restlessness, dazed state, irritability, disturbance of concentration, forgetfulness, learning difficulties, difficulty finding words.

#### Balmori (storks):

Alfonso Balmori Valladolid, Spain is published in Electromagnetic Biology and Medicine, 24: 109-119, 2005.]

Behavioural problems, concentration and co-ordination problems, apparent fertility problems.

Loscher and Kas of Universities of Hannover Veterinary School and University of the German Army in Munich 1998.

Hutter H-P et al, 2006, Subjective symptoms, sleeping problems, and cognitive performance in subjects living near mobile phone base stations, Occup Environ Med 2006;63:307–313 H-P Hutter, H Moshammer, P Wallner and M Kundi <a href="http://oem.bmjjournals.com/cgi/content/abstract/63/5/307">http://oem.bmjjournals.com/cgi/content/abstract/63/5/307</a>

Egypt (Abdel-Rassoul 2006) Community, Encironmental and Occupational Medicine Department, Faculty of Medicine, Menoufiva University, Shebin, El-Kom, Egypt Memory problems, headaches, sleep disturbance, dizziness, depression, concentration problems, irritability. PMID: 16962663 [PubMed - as supplied by publisher]

Preece (Cyrpus, 2005)

Migraine, headache, dizziness, depression, general vitality, mental/emotional problems