Top public health expert changes mind on EHS – “a real thing”
“so many people suffer from it ..... who are not crazy”

Dr. David Carpenter, the Harvard-educated founder of the University at Albany School of Public Health, was asked by the Palm Beach Post on 10th November: Does electromagnetic hypersensitivity really exist? and Are smart meters causing people to have symptoms? “I think it is a real thing,” Dr Carpenter said. “There are so many people who suffer from it.” He cited a Michigan couple owning two homes, one with a smart meter and one without one. The wife became ill at the one with the smart meter, but not at the other. The symptoms disappeared when the wireless smart meter was removed. Dr Carpenter said: “I have publicly expressed scepticism a couple of years ago. I have changed my view. I have found too many people who are not crazy and have symptoms.”

80% of ill health “caused by or contributed to by EMFs”

Dr Dietrich Klinghardt, a leading authority on ES, says that EMR pollution is “the big issue” of our time, just as the 2nd World War was in a previous generation. 6,000 studies support his and other doctors’ perception that 80% of ill health is now “caused by or contributed to by man-made EMFs”. See p.8.

nanoTesla DNA evidence could explain cancer – and EHS?

Héroux and Li’s study shows how cancer can be controlled, based on “impressive” evidence of magnetic fields changing DNA at 25-50 nT. This could be linked to a mechanism for EHS. See p.22.

ES groups should be “equal player” with government

Eileen O’Connor, director of the UK Radiation Research Trust, and Sissel Halmøy, chairman of the International EMF Alliance and secretary general for the Citizens’ Radiation Protection of Norway, in August visited Professor Yury Grigoriev of Russia who said: “Man conquered the Black Plague, but he has created new problems - EMF pollution.” Halmøy said: “Action must be taken immediately to adopt biologically based guidelines to protect children.” Pregnant women and children under 18 should not use mobile phones at all. Professor Oleg Grigoriev, deputy chairman of RCNIRP, said: “We need to include non-government groups in discussion and research. NGO’s are a new power and are representing people with electrosensitivity (ES) and should be an equal player.”

Italian supreme court: ICNIRP defeated by ICEMS

Italy’s supreme court followed the new scientific consensus on RF radiation dangers by upholding compensation for a brain tumour from use of a mobile or cordless phone. Microwave News on 24th October commented: “It’s easy to see the decision as a battle between ICNIRP and ICEMS.” ICNIRP, like the UK’s HPA, still follows the obsolete view that RF has only heating dangers. See p.11.

Top computer expert –
heating limits “too weak”

Frank Clegg, the former president of Microsoft Canada, spoke for C4ST (Citizens For Safe Technology) on 16th November: “I have been investing my time understanding the potential health effects associated with EMR … cell towers, Wi-Fi in schools and smart meters. I have concluded that Health Canada’s methods are out of date and safety limits are too weak to protect Canadians. China has limits that are 100 times stricter than ours.”

India rejects ICNIRP heating limits

From 1st September 2012 India reduced radiation levels to 1/10th of the ICNIRP heating standard (9.2 to 0.92 and 4.2 to 0.42 W/m2). The Economic Times on 12th July reported that Dr R S Sharma, deputy director general of the Indian Council of Medical Research, said the new norms will place India among the more radiation conscious countries.

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Conference with Dr George Carlo
Sarah Dacre is dealing with bookings for doctors and others on Saturday 5th January 2013 and for everyone on Sunday 6th January.

Say No to wireless smart meters!
Part of the UK government recognises the non-thermal health problems of gas and electricity wireless smart meters and gives everyone the right to refuse them. Australia has already reached 10% refusals. Some UK wireless smart meters use mobile phone networks. The UK government in 2000 agreed that children should not use mobile phones except in an emergency. Children absorb up to ten times the radiation compared with adults and the radiation is a class 2B cancer agent.

One way to refuse wireless Smart Meters
If you can use a computer with internet, see the new “Don’t Smart Meter Me!” campaign by Stop Smart Meters to tell your utility suppliers that you do not want a wireless meter for gas, water or electricity. See: www.DontSmartMeter.me and http://on.fb.me/Lk9h0S

ES-UK plans
ES-UK is very grateful to some generous donors who are making gifts for specific projects. Plans are being drawn up by trustees and we look forward to reporting on what we hope will be significant progress in several areas over the coming years.

CAF online
If you use the Charities Aid Foundation online giving system, you can now donate through it to Electrosensitivity UK (the full charity name, not ES-UK).

Equality and Human Rights Commission advice on ES disability
In October 2012 the Equality and Human Rights Commission advised that it is unable to intervene on behalf of ES people. They comment that “it is only a judge in court or tribunal who can determine whether any individual could be considered as a disabled person”, and that a disabled person is “a person with a physical or mental impairment which has a substantial and long term [over 12 months] adverse effect on his ability to carry out normal day to day activities”. It therefore seems that at present in the UK the only way ahead for an individual disabled by a particular EM exposure is to seek legal redress for each individual case.

Insurance for legal action over EM claims
To buy insurance to cover legal costs for an EM disability or injury claim, it is said that the insurer will want about 60% likelihood of success.

Legal class action
Anyone intending to pursue legal class action in the light of the verdict of the Italian supreme court may wish to contact the helpline. ES-UK has been approached by people who may become involved in this process.

HPA still rejects scientific consensus – advice awaited
In September the chair of trustees of ES-UK wrote to the chair of the Health Protection Agency board asking the HPA to withdraw its endorsement of the flawed chapter 6 of the 2012 AGNIR report on RF dangers. Although the report said that chapter 6 would review all the literature concerning ES, in fact there were references to only three articles from before 2000, an extraordinary omission considering that hundreds have been published since the condition was first described in the medical literature in 1932, including some studies, like Rea (1991), which provide clear supporting evidence for the condition. In addition, the report appeared to confuse the two conditions, EMF Neurosis and Electrosensitivity, an error not made by the leading medical centres of excellence studying ES outside the UK.

Since 2008, according to the scientific press, the scientific consensus of those involved has been that non-thermal RF exposure can have adverse health effects. The WHO’s IARC accepted this in 2001 and 2011, classifying ELF and RF as a 2B carcinogen, while in 2009 the EU Parliament voted that the heating limits still used by a few groups like the HPA and ICNIRP are “obsolete”. Russia accepted biological non-thermal limits in 1958, China in 1998 and other countries since then. The UK’s HPA, therefore, is lagging far behind the science.

MPs and government ministers refer ES people to the HPA, so it seems reasonable that the HPA should have an action plan for protecting people from this growing environmental health problem. It was recognised by the Nordic Council of Ministers’ classification in 2000, by the WHO as a “real” condition in 2005, and by the EU Parliament in 2009, and in 2011 the Council of Europe called on members states to provide “white zones” free of EM toxic environmental pollution. There are also protocols for dealing with ES, such as the Austrian Medical Association’s of 2012. Medical doctors now rate the first need for people sensitised to EM exposure as a reduction in this EM exposure.

We still await the HPA’s advice on how to deal with the ever-growing list of specific problems which are referred to this charity. These include the following.
(a) how children sensitised to RF can access schools using Wi-Fi, unless each area has one or more schools without Wi-Fi and mobile phone use, as adopted or proposed in some countries;
Irene writes to Alison

"Thank you so much for your help. Since we bought the Powerwatch handbook and found your advice group, I've been able to understand things so much more clearly. With the Newsletters sent to me, I just can't believe how many people all over the world have ES sensitivity like me. I just can't tell you how 'hellish' my life is. I was a premature sickly child. No-one knew about allergies then, or ADHD, so my Mum hit me with a stick for always being 'naughty'. Later a smallpox vaccination and gastroenteritis abroad worsened things. I knew I had ME in my teens. I had two ADHD/allergic children. After desensitisation went wrong, I was bedridden for two years and never got right after that. Constant pain has put an end to corresponding with most people. I can only write in bed now, supported with pillows. I have many syndromes and disorders along with intolerances and sensitivities. Thank you to Alison, Brian and Sandi for your support."

In memoriam Michael Nield

ES-UK extends its deepest sympathy to the family and friends of Michael Nield, who died on 3rd June 2012 aged 36. He had contacted several trustees of the charity some years ago. William Morris, the coroner for North and East Cambridgeshire, ruled at an inquest that he took his own life. His death was featured on 6th November in the Cambridge News under the heading ‘Zapping in head’ from mobiles led son to kill himself,” in the Sun under the heading “A TALENTED Oxford graduate killed himself because he was tortured by an allergy to MOBILE PHONES, an inquest heard,” and in The Metro on 7th November with “Musician ‘allergic’ to mobile phones took his own life”. The Sun said he was a violinist who “suffered from a condition called electro-sensitivity, which caused a painful reaction to all sources of electric fields including mobile phones and phone masts.” His condition was so severe he sometimes wore a micromesh suit or a hat with mesh to cover his face in a bid to keep phone radiation away when he was out of the house and slept with a microfibre tent over his bed to reduce his exposure to electric waves.” Mobile phones gave him a “constant zapping” in his head.

His family moved 150 miles from Herefordshire to the remote village of Wardy Hill, Cambs, to escape the signals. Speaking at the inquest into his death, Michael’s mother Barbara, a volunteer at Ely Cathedral who also suffers from a mild form of the condition, said her son had “tried everything” to improve his quality of life. She said: “Unless people have electro-sensitivity they just don’t realise what sort of effects it has. He tried everything to get better. He sought help, he ate a specific diet and he tried so hard. He would just get constant zapping in his head. I know the feeling as I get it myself, although not on the level that Michael did. That’s why we moved to Wardy Hill as it’s so remote. He did still sleep with a microfibre tent over his bed though, which did help. We saw it as a positive step but looking back it was his way of making a last-ditch attempt to be normal and put his illness aside. But that was obviously something he couldn’t do.”

ES NEWS

Book review: “Earthing: The Most Important Health Discovery Ever?”

Susan recommends this book by Clinton Ober, Stephen Sinatra and Martin Zucker (Basic Health Publications, 2010, 272 pages, ISBN: 978-159120283). “It contains extensive information on EMFs, including the simplest key explanation I’ve ever seen on electricity, EMFs, the Earth’s magnetic fields, and the problem with – shoes! The basic premise is that the Earth’s surface has negative ions, but all our electrical gadgets produce positive ions. This results in chronic disease, characterised by inflammation, because our shoe soles insolate us from the healing surface of the Earth with its negative ions. Chronic inflammation reflects electron deficiency. Just going barefoot, nothing else, can normalise this, if you do it on a regular basis, so normalising your balance of negative and positive ions. Impressive case studies are given, including two EMF cases, one a Twin Tower employee. I tried it myself – always a good test – briefly walking on the garden path barefoot, something I’d never normally do. Believe it or not, even that little bit made me sleep better than I have done for months! The patients all experienced better sleep. The two EMF patients found having a floor pad grounding them enabled them to use a computer. But don’t take my word for it. Read the book, see what you think, and try it out! I truly believe the authors are onto something.”
Earthing works!
A reader writes: “I have been sleeping on an earthed sheet for a week now and it has made a great difference to my symptoms. When I started my body voltage was 500 and I was sensitive to everything. I got it down to nil in a couple of days. I can get it up again by going into shops unprotected, or half an hour on the computer, up 50. If I lie on the sheet for half an hour it comes down again. The huge improvement is mental - I am no longer a victim. I do not think it is the total answer to all the EM pollution around, but one is stronger if not burdened by excess voltage. I got the idea from the book “Earthing” by Ober, Sinatra and Zucker.”

Earthed laptop trays
Earthed trays for laptops are said to reduce microwave radiation and ELF electric fields, helping to protect a user’s vital parts. They could be a useful present for a child or grandchild. Available from suppliers like www.emfields.org (tel.: 01353 778814, 9-2 M-F).

ADSL filters for phone lines, and handsets
Notes taken from: http://electricforester.blogspot.co.uk/2012/09/adsl-filters-easy-mistake.html. Wires in a cable or on telegraph poles adjoining a high-speed internet broadband link can pick up the signal by induction or capacitive coupling, and then carry it to other telephones in the area. You therefore need an ADSL filter (Asynchronous Digital Subscriber) to remove these extraneous signals. ADSL filters, about the size of a matchbox, plug in between the telephone and the phone socket. Two-wire ADSL filters give good protection but the phone may not ring. Three-wire give less protection because a third “ring” wire usually passes straight through unfiltered. Some people fit a ferrite choke around the wire to the socket to eliminate higher frequencies.

Telephone handsets of the “gondola” type with push buttons may be more troublesome with their extra electronics. This can also apply to hearing-aid compatible handsets using induction to connect with a hearing aid. Speaker-phones usually require a mains transformer, adding to electro-pollution. Ones which are line-driven should be less troublesome.

WiPNET – coaxial cables replacing dLAN and Wi-Fi
The new WiPNET (Wireless and Photonic Network) system uses special plugs on existing TV coaxial cables for both TV and internet signals, along with a POE (Point of Entry) filter, according to the BBC Click programme on 27th October. Under the MoCA (Multimedia over Coax Alliance) 1.0 specification, approved in 2006, and the newer 1.1, it can achieve up to 175 Mbps in the range 500-1,500 MHz. Because coaxial cables are shielded, there is little or no wireless radiation into the house, while speeds and bandwidth can be much higher even for multi-use, with WiPNET at 135 Mbps compared with dLAN (Homeplug) at 30 Mbps and 802.11n Wi-Fi at 10-30 Mbps. WiPNET is ideally suited as a replacement for Wi-Fi in hotels, homes and offices with coaxial cables to different rooms.

Dangers of radiation in cars
When the engine of a new BMW car was on, the driver’s area had quite strong microwave radiation, particularly where the knees and legs would be, according to Martin Weatherall on Burgerwelle News on 23rd September. The driver reported fatigue during a journey. Alasdair Philips of ‘Powerwatch’ said that some car alarms use WiFi to link with the house nearby and some use mobile phones to report the car’s GPS position regularly and send a SMS message if the car is tampered with. Electric cars and large cars with the battery in the boot and the engine at the front fill the inside of the car with high-frequency switching EMFs.

Cardiff irradiation?
Cardiff may bid for government money to allow 4G high-speed broadband through Wi-Fi on bus stops and street furniture, Wales Online reported on 18th September.

UK airports replace x-ray with GHz scanners – DNA damage?
In September it was announced that Manchester airport would replace the backscatter x-ray scanners, banned as dangerous by the EU, with GHz scanners. The HPA report of 2012 claimed: “Millimetre wave body scanners operate in the extremely high frequency (EHF) region (30–300 GHz), just below the sub-millimetre range, which is known as the terahertz range. At these frequencies, the absorption of electromagnetic fields by the human body is very superficial and mainly confined to the skin area. Little information is available about technical specifications of these scanners and the levels of exposure. However, the manufacturers claim that the signals created by the scanners are thousands of times less powerful than those from other commercial RF devices such as mobile phones, wireless handsets and other standard household devices.” It has been shown, however, that GHz waves can damage DNA (Alexandrov BS et al, Phys Lett. 2010).

Sir Bernard Lovell - ES symptoms from radiation?
Sir Bernard Lovell, the head of Jodrell Bank, suspected his “inexplicable exhaustion” following a visit to Russia in 1963 was caused by radiation, according to his diaries, as reported by the
On 19th September. This could fit with the illnesses caused by microwaves used against the USA embassy in Moscow from 1953. It also matches the tiredness, often delayed, and broken sleep patterns which some people experience from Wi-Fi and phone masts.

**Directed energy causes ES in computers**

In 2007, according to an Aol Defense report on 23rd October, Israel apparently used non-lethal electronic directed energy to shut down Syrian air defences. In 2009 Boeing, Raytheon and the US Air Force started CHAMP (Counter-electronics High-powered microwave Advanced Missile Project). On 16th October 2012 a jet-propelled cruise missile was tested in Utah. Its EM pulse knocked out computers, cameras and lights. Mike Booen, vice president for directed energy at Raytheon, commented that non-kinetic weapons left zero collateral damage.

**Birds disorientated in late October**

On 26th October BBC Radio 4 News reported on thousands of common birds found exhausted or dropping dead from the sky on the east and south coasts of England over recent days, far from their usual migratory paths. There were no physical signs of harm. The BBC quoted a RSPB report blaming fog and winds. A professional boat skipper said: “While fishing about 10 miles south of Portsmouth, we witnessed thousands of garden birds disorientated, land on the sea and most drowning. Species included goldcrests, robins, thrushes and blackbirds. The sky was thick with garden birds. I estimate I saw 500 birds die and that was just in our 300-yard sphere. On the way home we just saw dead songbirds in the water: it was a harrowing sight.”

**Microwave anomalies in late October**

There were reports from the US of microwave anomalies coincident with the development and course of Hurricane Sandy off the east coast of North America from about 25-28th October. Some reports also claimed unusual HAARP features in the sky.

**800 km walk to raise ES awareness**

Wendy Hoy was to walk 800 km from Port Franks to Ottawa, to raise awareness about electro-sensitivity, according to Mast Victims on 21st September. She is a founding member of the Lakeshore Coalition opposing mobile phone towers in an environmentally sensitive area of Lake Huron. “Cell Tower emissions are a source of involuntary exposure to a type of electro-magnetic radiation referred to as microwave radiation. And not one single Canadian has a say in whether or not you live next to a tower,” said Hoy. “An airline pilot who is now electro-sensitive and cannot fly anymore has just moved here. Right after she got here, up go the cell towers. Where are these people supposed to live?”

The local council at Port Franks voted to investigate the feasibility of establishing a “white zone”, an area with lower radiation levels. Residents had a face-to-face meeting with Industry Canada but were advised any attempts to have areas of lower radiation would be blocked by them. Hoy said: “Despite overwhelming objection, Industry Canada has the final word in whether or not Bell Mobility can go ahead with plans to blanket Lambton Shores with cell towers. Bell has more control over our lives than we do.”

The US congressman at Port Franks voted to investigate the feasibility of establishing a “white zone”, an area with lower radiation levels. Residents had a face-to-face meeting with Industry Canada but were advised any attempts to have areas of lower radiation would be blocked by them. Hoy said: “Despite overwhelming objection, Industry Canada has the final word in whether or not Bell Mobility can go ahead with plans to blanket Lambton Shores with cell towers. Bell has more control over our lives than we do.” She stopped in Peterborough to meet with Mayor Daryl Bennett and march with about 20 local residents who have been fighting against mobile phone masts near homes and Wi-Fi in schools, according to the Peterborough Examiner on 25th September. Facebook: Wendy Walks for ES.

**Child protection from EM exposure?**

From Gary Duncan: “Wanted: expert witnesses or documentation for use in a child custody case in Virginia (USA) between a cell phone wielding, EHS-discounting mother and a young father who knows better. Please respond to: Gary Duncan, Smart Shelter Network: <gd@smartshelter.com>”

**US Congressman on cellphones and headaches – “no question”**

Congressman Dennis Kucinich says: “No question about it: from my own experience, there was a connection between the frequent use of the cellphone and the headaches. I was even having problems using Bluetooth.” On 6th August the Washington Times reported that Kucinich was introducing his Cell Phone Right to Know Act requiring mobiles to be labelled with radiation strength (video: www.youtube.com/watch?v=kbpGuq-2ETU).

**Greens oppose Paris Metro 4G and WiFi**

The Green party opposed high radiation from the arrival of 4G and WiFi in the Paris Metro, according to Le Parisien on 13th September.
Metal dental bridge causes migraines?
There is a report of someone no longer having migraines close to a mobile phone once her metal dental bridge was replaced with a ceramic one.

Danger of heavy metals for mycotoxins and ES
In discussing effects of metals from, for instance, dental amalgam fillings, the Dr Mercola website on 25th August stated: “If you have accumulated toxic metals in your brain, and since your brain is an antenna, you can actually receive more cell phone radiation, which in turn can cause the microbes in your system to overreact and create more potent mycotoxins. This can create a never-ending vicious cycle between the microbes and metals in your body and your exposure to EM fields, which can lead to hypersensitivity. I have seen that a high percentage of illness including chronic infections are caused, and/or aggravated, by EM field exposure. Then chronic fatigue, fibromyalgia and other chronic pain syndromes can easily develop or worsen.”

EMF Analysis website
There is an ever-increasing number of new websites on the health dangers of EMF and EMR with advice on protections and ES symptoms, all run by voluntary and private groups. Governments are lagging way behind on this issue. EMF Analysis, based in the USA, has easy links to some useful documents.

Oscillatorium
The website Oscillatorium (http://www.oscillatorium.com/index.html) has much useful information in the form of linked maps.

ES explained on TV
Dr Andrei Tchernitchin, the chairman of the Environmental Committee of the Medical College, talked on the Spanish TV station T13 on 28th September about the dangers of Wi-Fi. He referred to the “allergy” to Wi-Fi, as explained by electro-sensitivity, which affects one in 1,000 people.

Indian students – “headaches, dizziness and nausea”
Four final year IT students of Xavier’s Institute of Technology, Mahim, Kanica Jain, 21, Sasha Sequeira, 21, Nileema Lobo, 21, and Jaysel Meledath, 21, began to research mobile phone mast radiation six months ago, after receiving complaints from students and faculty members about headaches, dizziness and nausea, according to the Hindustan Times on 12th October. “After studying theory papers and discussing the topic with experts, we concluded that the health hazards were an effect of exposure to mobile tower radiation,” said Lobo. They are now trying to creating awareness about the implications of mast radiation among students.

Finnish book on EHS
A book with stories of Finnish EHS people (ed. Anelma Järvenpää-Summanen and Hanna Nurminen, “Kun säteily satuttaa”, ISBN 978-951-37-6267-4), has been published in Finland. It also contains interviews with scientists, like Drs. Reijo Ekman, Marjukka Hagström and Professor Olle Johansson. Publicity has included a 30 minute Finnish public service TV programme, http://areena.yle. fi/tv/1514998 . Thanks to their work the attitudes towards EHS in Finland are gradually becoming less negative. Copies (Finnish language only) from: hanna.nurminen@koneensaatio.fi

Norwegian Institute gets it wrong on ES
The Norwegian Institute of Public Health in 2012 published a report on the health dangers of low-level radio-frequency EM radiation. Although it admitted that ES was a major health problem affecting between 1.5 to 10% of the population the English summary claimed that “Scientific knowledge gives no basis to recommend measures to reduce or avoid exposure to electromagnetic fields”. Such a statement shows extraordinary ignorance of the thousands of studies showing adverse health effects of EM exposure and is an amazing statement for a document of 2012. All the leading international experts on ES have as their key recommendation that ES sufferers must first reduce EM exposure. In 2000 the Nordic Council of Ministers defined ES by reference to the way symptoms are reduced or eliminated when the source of EM exposure is reduced or eliminated. The situation has not changed over the last 12 years.

The full report carefully does not say that ES does not exist, but clearly wishes that it did not - don’t we all? The full report starts by accepting the implications of the McCarty study showing ES reactions but later makes an invalid move from the need for replication to total rejection (p,126, Google translation, tidied): “In principle, it is sufficient to demonstrate that one person gets symptoms of EMF weaker than the levels known to cause symptoms or that can be detected, to prove that such a correlation exists: however, several studies of the same person are needed to reduce the chance that the results are due to chance.” But on page 127: “It is not possible to conclude from the aforementioned attempt by McCarty and colleagues (McCarty et al. 2011).”... “So far, it appears from these studies there are no grounds to conclude that there are individuals who have health problems from exposure to weak EMF.” This is illogical on two counts: to mention McCarty is to show some evidence, not none; and evidence like Rea 1991 and other studies provide some correlation and thus some corroboration.
Dutch information on ES
A booklet of 56 pages was published in Holland in April 2012 called “Electrosensitivity: Health complaints near sources of electromagnetic fields” (Knowledge note 2012-001). It is a strange mixture of generalised assertions for and against the existence of ES, without any scientific references or direct quotations, examples or measurements. It mixes discussions of problems of withdrawal from society because of increasing EM pollution with assertions about the supposed benefits of cognitive behavioural therapy. It is not apparent who would benefit from reading this. It has no clear definition, diagnosis or solution for this growing medical problem, and omits ES problems in children, pets, animals and plants. (www.kennisplatform.nl/Files/2012-08-31KnowledgeNoteonElectrosensitivity.pdf)

The 2-page summary designed for doctors, called “An electrosensitive is looking for help”, may be more useful. It gives two measures to help reduce complaints: ‘Limiting exposure’ and ‘Learning to manage the health complaints and exposure’. (www.kennisplatform.nl/Files/2012-08-31Summarynote-KnowledgeNoteonElectrosensitivity.pdf)

Current state on lights
Notes from information by Catherine Hessett of Spectrum Alliance:
Rough service, fireglow and other coloured incandescent lamps are still available; golf ball and candle bulbs at 15W and 20W may still be available along with lamps for ovens at 15W. Maplins stocks some, and screw-bayonet converters. A review of the Regulation is due in 2014, when rough service bulbs may be banned. It is unlikely that this will come to MEPs. It will be dealt with by negotiators from the domestic governments. The Spectrum Alliance met with Lord Taylor of Holbeach, the former Environment Minister, on 21st August 2012. The UK says it will not ask for an exemption to allow people to obtain incandescent light bulbs in the review in 2014. They did so last time when the Regulations were being negotiated and received no support from other countries.

People can ask their MPs to back Sheila Gilmore MP’s support for the Spectrum Alliance campaign in Westminster; write to their MEPs asking them to write to the Commission for an exemption from the ban for light sensitive people and raise the matter in the European Parliament; write to Commissioner Gunther Oettinger, EU Commissioner for the Environment, asking for an exemption to the ban for light sensitive people when the ban is reviewed in 2014. (Commissioner Gunther Oettinger, European Commission, B-1049, Brussels, Belgium)

In 2016 the EU will look at the Regulation again and may also ban energy saving halogen incandescents. (These use 30% less energy than ordinary incandescent bulbs.) These bulbs are still a problem for people who have light sensitive Lupus and some others. The legislation has so far dealt with non-directional lamps. The draft of the directional (reflector) lamps legislation refers to an exemption for “special lamps” where photosensitivity is an issue.

Street lamps
There are reports of ill health when LED street lamps are installed, possibly with 4G antennas.

Tattoos, dental amalgams, MRI and mobile phones
Tattoos using iron oxide can cause tingling or even burns through electric currents induced by the very strong magnetic fields in MRI scanners (Ross Jr, Matav MJ, Sports Health, 2011). This was first reported in 1997 (Kredstein ML et al Plast Reconstr Surg.). It can be worse if the tattoo is in loop-shaped shaped like an RF pick-up logo, or if there is self-resonance between two similar tattoos on, say, both knees. MRI can have the same effect with some metal dental fillings, and, like mobile phones, it can release mercury from amalgam fillings (Mortazavi SM et al, Pak J Biol Sci, 2008).

Spread the word! – “Stop microwaving kids”
David Morrison fixing a poster in Portland: “Stop microwaving kids. Take Wi-Fi out of schools.”

Incandescent light bulbs
Holbury Hardware Stores near Southampton had some traditional “rough service” lights available (tel.: 02380 891208). Incandes-
Lightning and ES symptoms

A recent review of keraunopathy, the injuries caused by lightning strikes, shows that the most common symptoms are neurological and cardiovascular (Pfortmueller CA et al, Emerg Med Int, 2012). Other typical electro-sensitivity symptoms, such as audiovisual and amnesia, are also reported in the literature. A typical lightning strike lasts 2 milliseconds and, although at high voltage, produces few burns because of flashover, where most of the current flows externally over the skin, although there can be burns at entry and exit points, particularly if the victim is in contact with metal or water. In a minority of cases fatality follows cardiac or respiratory arrest, or major trauma often from internal blast.

In ancient times Pliny reported that monk seals were the only animals never struck by lightning and that tents made from seal skins protect from lightning (NH 2.56). Modern scientists (Dosi A, thesis, Bangor, 2000) have found that seal skin often contains a high level of iron, perhaps helping to produce a flashover effect.

X Factor Simon Cowell’s home - suffering EM stress?

On the 25th September Simon Cowell announced on Twitter that “Today I had someone heal my house. Strange but great,” according to a report in the Daily Mail on 26th. The report quoted Sandra Kendrew, a “house healer” from Harrogate, who thought that Cowell’s house in Beverly Hills, California, could be suffering from electromagnetic stress, because of a constant stream of emails and phone messages: “The bad energy in his house may have had an effect on his immune system and led to him feeling ground down. House healers can dissipate bad energy caused by wireless internet or geopathic energy.”

DR KLINGHARDT

Dr Klinghardt on EHS and related ill health

Dr Dietrich Klinghardt, a leading authority on ES, in a new 42-minute video called “Smart Meters and EMR: Health Crisis of our Time” (www.youtube.com/watch?v=b_wxM6iAF1I&feature=colike) says that EMR pollution is “the big issue” of our time, just as the 2nd World War was in a previous generation. He explains how scientists can now predict the risk of a mother having an autistic child from the amount of electro-pollution in their sleeping environment during pregnancy, and how 6,000 studies back up his and other doctors’ perception that about 80% of ill health is now “caused by or contributed to by man-made EMFs”. Fibre optic cables, a “beautiful” technology, could easily replace the damage of EMR. The Naila study showed how the arrival of a phone mast caused increased cancers after 5 years, with four times the usual rate after 10 years.

Wireless smart meters can be particularly powerful and devastating, with his patients showing, for instance, relapses in Parkinson’s and Lyme disease and the onset of autism. He stresses that all people, not just the 2-3% of EHS, suffer, as can be seen from markers, although only the EHS are sensitive enough to feel the change. Markers include: increases in TGF 1, MMP 9 and copper, and abnormalisation of hormones and neurotransmitters. Two warning signs are erratic high blood pressure and irregular heart rate. He also reports on a “German” solution to wireless meters on the outside of buildings, involving an axe.

Dr Klinghardt sees electrosensitivity as dependent on the density of minerals, electrolytes and body size, where larger people may make better antennas. His protocol is: (i) a heavy metal detox, to reduce antenna function, (ii) increasing insulation by treating chronic infections such as Lyme disease, and (iii) rebuilding myelin. He recommends certain mushroom extracts to give ES people protection, since mushrooms thrive in electro-pollution.

Sleeping areas should be under 5 microW/m², by using shielding paint and netting. He lists the four worst items which should be removed from the home as: 1. Wireless smart meters; 2. Cordless phones; 3. Wi-Fi; 4. Low energy bulbs, especially CFLs, an “unacceptable technology” because of the EMR they emit and put onto the wiring.
**READERS’ COMMENTS**

**Flying if you’re ES – ask for help**
A reader comments: “Someone recently told me of their bad experience with a British Airways flight. I have flown usually with Easyjet and the staff are fantastic. I pre-book an assisted flight whereby they take me separately through the check in points away from others with mobiles. They clear me a space to sit right at the back of the plane furthest from radar. I put on my shielded wrap on my head and I fall asleep! (I purposely don’t go to bed the night before so that I am exhausted and can sleep) but in reality I think it might be my episodes of narcolepsy - usually I experience these after eating and with computer work or high EMF. So I am literally zonked out for the entire flight. It helps that on each occasion I have spoken to some very enlightened staff members who are keen to know about electrosensitivity and are in agreement with what I tell them and keen to find out more. It could be because of the shielding I haven’t experienced stabbing sensations to my head or just lucky with the frequency I am exposed to. I learnt that the Vodafone signal is the one that seems to cause the worst symptom for me.”

**Wi-Fi at Royal Festival Hall – folly or ignorance?**
A reader reports that he noticed the Royal Festival Hall in London now has Wi-Fi. At a recent concert he not only felt the usual ES symptoms but heard another member of the audience coughing loudly after about 15 minutes’ exposure. Since an irritating cough can be a reaction to adapting to Wi-Fi after 10-20 minutes’ exposure, it seems foolish to install Wi-Fi in a concert hall, particularly when there is no need for it and it is now a class 2B carcinogen.

**Funded protection allowed me to continue work**
A reader writes: “I was teaching in a university in England when my ES symptoms worsened considerably. I was getting painful tonsils, palpitations, dizziness and on one occasion lost consciousness. I was recommended to try contacting the Department of Work and Pensions Access to Work fund to see if they could help me. They did an assessment at my work place and funded some screening material from Aaronia to help me and also screened my car with film to shield me on my commute to work. This was amazing and really helped me get to work and keep my job.”

**Bees sent awry by a cordless phone base station**
A reader writes: “I was interested in the research showing that the decline in bees’ numbers is partly related to phone signals. During the summer I tried putting a cordless phone base station near a wild bees’ nest in our garden. When I switched it on using a long extension lead, the bees entering and leaving flew around more wildly and randomly than before or afterwards. It appears to confirm that phone radiation upsets them.”

**Birds driven away by mobile phones**
Following on from a reader’s comment in the last Newsletter on the growing absence of small birds in gardens, another reader writes: “Several years ago before iPhones and smart phones, my neighbours and I noticed that the garden was full of birds early in the morning, but then by 9.00 am they would disappear for the rest of the day. I thought this was odd and it must be something man-made, so I got my electromog meter out early in the morning at 6.30 am and found that it did not make a noise; by 8.30 am there would be pockets of noise and the birds started to leave; at 9.00 am the noise was continuous from the meter and all the birds disappeared. This happened every morning. I then realised that the birds left when a lot of mobile phones were in use. I emailed the RSPB about it and they said that a lot of people had noticed it, but added that pulsed microwaves from masts were nothing to do with it. [Studies such as Balmori et al, Everaert et al, Electromagn. Biol. Med., 2007 show fewer house sparrows in high electric fields – Ed.]”

**Beware hotels without Wi-Fi health warnings**
A reader reports attending a conference at a London hotel. After a couple of hours in the conference room he began to suffer from sudden tiredness, then a sore throat, then stomach trouble, then fuzziness in the head, then increasing headaches. The symptoms disappeared at lunchtime in the restaurant but returned in the conference room after lunch. On checking at the end he was told there was Wi-Fi [a class 2B carcinogen – Ed.] in the conference room. He did not see any warning notices.
How to use aluminium foil to help shield a room
Some suggestions by Alice on “foiling” a room.

1. Buy thick extra strong aluminium foil from Lakeland; this is preferable to kitchen foil.
2. Do NOT use wall-paper paste as it corrodes the foil, and can cause black mould.
3. Stick the foil on in sheets, like wall-paper, using conductive tape (from EMFields, or equivalent on eBay) if possible. Conductive tape is expensive, so I also used double-sided tape and just silver coloured tape. However, you need to make sure there are no gaps. I had three layers of foil, due to the first two corroding with wall-paper paste, so I didn’t need to worry so much about gaps.
4. I would recommend using 2 layers of foil if you can, as it protects more than one and then you do not need to worry as much about gaps. By experimenting we found that 10 layers are required to block out mobile phone signals. I also have carbon paint on all the wall and door. So, this and the 3 layers of foil protect against a Wi-Fi router next door very near to the room. There are usually no bars showing reception, but sometimes one bar of Wi-Fi comes and goes.
5. Use material like ‘Budapest’ in the windows. I also have some at the top of the door for extra protection. You should get a sample of the material and check to see if you are sensitive to it before buying. Gary Johnson did this for me, and I was sensitive to Noradell, Naturelle and Electrocloth; these are expensive, so check first. Budapest looks very good and protects more than foil, but I know some people are sensitive to it. For the very large French windows, the cost was about £200 for Budapest.
6. Initially I was okay with Chromax in the windows, and not foiling the radiator, but after some problems last Xmas, I now have the radiator foiled and Budapest in the windows. I can still use the radiator, but it blows the foil off a bit. So, I have decided not to use it, as the room is quite warm anyway and some recommendations for chemical sensitivity are to use an electric heater instead of gas radiators anyway.
7. The foil must be earthed: just wire an earthing lead into a plug and stick onto the foil; the plug does not need to be switched on.
8. Electricity: I am not noticeably sensitive to normal electricity, but only to pulsed radiation and magnetic fields. So the following suggestions may need to be different for someone who is. The only electrical items in the room are lamps, and I don’t have any very close to the part of the bed where I sleep. Ideally, pull them out of the sockets at night. It is good for anyone not to have too much electricity in the sleeping area anyway. It is okay for me to use things such as a laptop in the room; I usually keep it unplugged. This is probably not a great idea, but I focus on the sleeping situation.
9. The only problem I’ve really had with things getting through the foil seems to have been Tetra, when it was increased for the 2012 Olympics. So you need to be aware of this. I don’t think that foil can protect against Tetra completely and, when it gets in, it bounces around the room, so that could make things worse. I had not previously had any big problems with Tetra. The pendant, remedy and extra Tetra elements added to my Light Box by Gary Johnson have completely sorted out this problem, but it is nowhere near as serious as the Wi-Fi issue in my case.
10. After a year, the purely foiled room was getting a bit much, so I added the material for a 4-poster effect, with extra strong double-sided tape, and also the bubble and red wrapping paper on the walls, with Blu tack and tape, as in the picture. My cats are really happy relaxing and sleeping in the room, so the ‘foiled’ environment can’t be that bad! Most people who see it think it’s purely for decorative reasons!

Shielding grants for EHS in Sweden
On 4th September Sweden Radio broadcast a report on “Decisions on support to EHS”. Örnsköldsvik Municipality may soon pay for foil wallpaper, installation of a gas stove and shielding paint for floors and ceilings, for EHS residents. The city was to decide whether to grant a subsidy of 200,000 per year for protecting homes. This system already exists in a number of other municipalities. Erland Lundgren, chairman of the ElectroSensitive association in West Norrland County, said grants to assist EHS would mean a lot: “We have 60 members and I believe that at least half share this need, ten of which are urgent. It is hard to find low-radiation environments on your own.”
EMSRI – new US centre for shielded homes and ES research

The ElectroMagnetic Sensitivity Research Institute (EMSRI), begun in 2012, aims to develop safe housing in Rockvale, Colorado, US, along with engineering and medical research facilities. The partly shielded site of 59 acres, which could house 25-50 cabins, was bought by Dr. Gary Johnson, a former university lecturer in electrical engineering now sensitised to mobile phones and wireless. The other principal researcher is Dr Glen Rein, a former assistant professor in biochemistry who founded the Quantum Biology Research Laboratory in 1988. They are looking for more researchers (engineers, biochemists, etc.), medical people, support personnel, sensitives wishing to live in a low emf environment, and investors.

Shielding wallpaper and paint

In the last few years many new shielding materials, such as wallpapers (illustrated), paints (illustrated) and window films, have become available. Ask for advice on application from the supplier. See the ES-UK directory (on the website or phone the helpline) for a list of suppliers, including EMFields (01353 778814) and EMF Clothing Ltd (01888 560047) and others.

ITALIAN COURT: MOBILES CAN CAUSE TUMOURS – “A MOTORWAY TO LEGAL ACTIONS”

A landmark legal ruling was reported by the Sun on 19th October, followed by the Daily Telegraph on 22nd. Innocente Marcolini, 60, an Italian businessman, fell ill after using a handset at work for up to six hours every day for 12 years. Italy’s Supreme Court in Rome stated there was a “causal link” between his heavy phone use and the tumour. Experts have predicted a flood of legal actions from victims. Mr Marcolini, who was diagnosed with a brain tumour after complaining of head and chin pains, warned: “People must be told the risks.” His tumour was discovered in the trigeminal nerve, close to where the phone touched his head. It is benign but threatened to kill him as it spread to the carotid artery, the major vessel carrying blood to his brain. His face was left paralysed and he takes daily morphine for pain.

The judgement (Case 3, 12 October 2012, n. 17438, the Third President, Speaker Bandini, by judgment of 10, 22.12.2009, the Court of Appeal of Brescia) condemned the INAIL (Italian Workers’ Compensation Authority) to pay to M. I. the pension for occupational disease scheduled for disability at 80%.

Angelo Gino Levis, an oncologist and professor of environmental mutagenesis, who gave evidence for Mr Marcolini along with neurosurgeon Dr Giuseppe Grasso, said: The court decision is extremely important. It finally officially recognises the link. It’ll open not a road but a motorway to legal actions by victims. We’re considering a class action. Tumours due to radiation may not appear for 15 years, so three to five-year studies don’t find them. We’ll only realise in years to come the damage phones can cause children.”

ITALIAN COURT: REJECTS OUTDATED WHO, ICNIRP AND BIASED INDUSTRY STUDIES

The CTU summarized studies from 2005 to 2009. Three studies, by the Hardell group, showed a significant increased risk of acoustic neuroma; one from 2009 showed acoustic neuroma at 1.5 for cordless phones of 1.5 and 1.7 for mobile phones, and after 10 years, 1.3 and 1.9; in a 2006 study exposure >10 years showed 2.9. The 2000 WHO study, which ruled out any adverse effects on health, was based on data before 2000. The studies cited by the CTU, unlike the IARC study co-funded by mobile manufacturers, were independent.

ITALIAN COURT: RF NEUROMA HIGHER RISK THAN IONISING RADIATION

The risk factor from ionising radiation, for Japanese survivors of the atomic explosions at Hiroshima and Nagasaki, was 1.39 for all cancers, with a minimum of 1.22 for tumours of the uterus and cervix, and a maximum of 4.92 for leukaemia. Therefore the average risk of ionising radiation was less than RF exposure for intracranial neuromas.
Italian court: why biased studies were rejected
An important paper dated 23rd October from the International Committee for Electro-Magnetic Safety, called “ICEMS Position Paper on the Cerebral Tumor Court Case”, explains the large amount of medical scientific evidence used to support the verdict. It explains why the studies showing no effect produced with industry backing were rejected. It also explains the procedure under Italian law for establishing blame where it is evident that exposure rates have been exceeded.

Canadian EHS bring forward Human Rights complaint
The BC Human Rights Tribunal has ruled Citizens for Safe Technology can bring forward its complaint against BC Hydro, according to CKNW on 30th August. It alleges the utility discriminated against people diagnosed with EHS told to avoid exposure to wireless technology by forcing them to install smart meters. These people can no longer live in their own homes because of growing electro-pollution, according to the radio show “Character Driven” on 22nd October on CHLY 101.7 FM. The group’s representative complaint, brought forward like a class action, is accepted for filing and has not yet been assessed for merit.

Legal challenge over mobile phone parking meters
Denise Barton of Santa Monica, California, sued her city hall on 6th August after radiation from parking meters’ wireless signals “made her sick”, giving her tinnitus, ear infections, an irregular period and tightness on the left back of her neck, according to the Santa Monica Daily Press on 14th August. She has demanded the city pay her $1.7billion for the damage done since the new meters were installed in April 2012 and $1.7million every month thereafter. She said “I know it seems a little big, but they can’t do things that affect people’s health without their consent.” The parking meters emit mobile phone radiation for 2-4 seconds whenever a car enters or leaves a parking place. This legal challenge was also featured by ABC News and the Daily Mail on 21st August.

Firstenberg case dismissed – “proof” needed
Arthur Firstenberg’s lawsuit against his Santa Fe neighbour’s use of a mobile phone and computers was rejected, according to ABQ Journal North on 19th September. State District Judge Sarah Singleton, citing reports by the World Health Organization, wrote that Firstenberg cannot “prove” causation of his ailments from Wi-Fi devices and therefore he “cannot prevail” in the case or sustain it and “summary judgement”, tantamount to dismissal, in favor of the defendants “is appropriate”. Firstenberg had until 1st October to file objections. Firstenberg’s suit had the potential to have a major impact on the wireless industry and customers, which could set a legal precedent in the field. Firstenberg sued his neighbour Raphaela Monribot in 2010 for $1M for “injuries, illness, pain and suffering” and another $430,000 for loss in value of his home and also named landlord Robin Leith as a defendant. Firstenberg said that Monribot’s computers, phones and even dimmer switches caused him physical symptoms ranging from hip pain to heart damage.

Lawyers demand fees
Lawyers who defended clients sued by Arthur Firstenberg for damaging his health by their use of wireless devices want him to pay their legal fees and other costs totalling nearly $170,000, according to the New Mexican on 26th October. In addition he owes $100,000 in fees to his own lawyer.

USA case over mobile phone brain tumour
On 6th November an Illinois man and his wife filed in the Superior Court of the District of Columbia (Case No. 0008533-12) a cell phone radiation lawsuit against several mobile phone manufacturers, after the man was diagnosed with a brain tumor in his left frontal lobe, Bernstein Liebhard LLP reports on Yahoo News on 17th November.

It alleges that years of heavy mobile phone use and exposure to cell phone radiation caused the plaintiff’s brain tumor, and that the defendants were aware of numerous studies and experiments demonstrating the health hazards of RF radiation that date back to the late 1940s, yet continue to maintain to the public at large that cell phones are absolutely safe. They cite the 40% increase in glioblastomas in the WHO’s Interphone study, and the WHO’s IARC classifying of cell phone radiation as possibly carcinogenic to humans. “As evidence of the harmful side effects of cell phone radiation continues to accumulate, we expect that more consumers will pursue similar claims in the near future,” says Bernstein Liebhard LLP, the law firm representing individuals in mobile phone radiation lawsuits.
Dr Sosa: “the biggest experiment in history” – “a criminal action” – “violates the Nuremberg Code and Helsinki Declaration” – “an international holocaust”

Excerpts from an article dated 2008 on www.electrosensitivesociety.com/2010/06/01/the-dr-carlos-sosa-m-d-story/

Dr Sosa writes: “Only through litigation will changes become effective. The Microwave Syndrome is not only the biggest experiment in the history of mankind, but also it is one of the biggest epidemics recorded in medicine. The Health Department of the State of California is estimating that the total number of people affected in the United States by EHS or the Microwave Syndrome is over one million people. The Microwave Syndrome, or Electromagnetic Hypersensitivity, constitutes a criminal action that has violated medical ethics, the Nuremberg Code, the Helsinki Declaration, and human rights of mankind as a species. It is an international holocaust that is killing hundreds of thousands around the world.”

“The ICNIRP is a private organization that was built up in order to protect the private interests of the American and European cell phone industry. … This person has to be sent to criminal trial for his actions against millions of human beings in the five continents. The WHO knew of this damaging action decades before the introduction of cell phone telephony in the world. … In 1973 the WHO conducted an international Congress in Warsaw under the auspices of the government of Poland and the Federal Drug Administration of the United States. The results of this congress were published in the book “Biological Effects and Health Hazards of Microwave Radiation” (1974). … up to half of the funds raised for the EMF project of the World Health Organization came from the cell phone industry. The conflict of interests is like having the tobacco industry sponsor research in order to deny that cigarettes cause lung cancer …”

Swiss Re report of 1996 – claims “threaten existence of the insurance industry” - the end of all EMR use?

A report by the insurer Swiss Re from 1996 makes interesting reading (www.emfbioshield.com/ElectrosmogEng.pdf). It seems to have been written to plead for the survival of the insurance industry, recognising that if liability suits succeeded, this would confront the insurance industry “with claims on a scale which could threaten its very existence” (p.5). This could explain why UK courts seem resistant to the ideas the report then expounds, about the changing nature of causation and liability in the light of quantum biology, where all EM bio-electric effects are relative rather than absolute, and the uncertainty principle and not determination appears to be the key. In contrast other courts in the EU have awarded damages for EMF exposure based on a percentage of liability.

The report tried to grapple with the effects of the uncertainty principle in quantum biology: (p.24) “We have lost both certainty regarding the certain and certainty regarding the impossible.” It admits (p.28) “EMF research has already found out too much to be able to ignore the conceivable health risks.” It also recognises the “butterfly effect” whereby a small event can trigger a chain of events leading to much more significant consequences: (p.23) “As soon as it can be demonstrated that one of these factors discernibly increases the probability of the effect, however, we refer to it as a cause.” This appears to include small amounts of EMF exposure leading eventually to EHS or other adverse outcomes such as cancers or neurological problems, meaning that any EMF exposure, however, small, could be construed as a cause and thus contributes to the eventual outcome, leaving the agent responsible for the EMF exposure liable.

The “EMF problem” (p.30) is seen as composed of three sub-problems: (i) multidisciplinary, involving natural science, technology and medicine: How far do weak electromagnetic fields affect the human organism? (ii) socio-legal: How should society deal with technologies which cannot be used with absolute safety and which may therefore represent a hazard? (iii) underwriting: How can the insurance industry help in dealing with such phantom risks?

The report effectively pleads for allowing some people to suffer for the convenience of the rest: (p.30) “What maximum number of people are we willing to accept who may suffer harm within a given period as a consequence of the practical application of a certain technology? If the response to this question in ‘None,’ it will be necessary to dispense with technology entirely.”

Nevertheless this report dates from before the WHO’s IARC classified ELF and RF in 2001 and 2011 as class 2B possible carcinogens, and also before a very large number of studies showing EMF effects at cellular and organ level. Nowadays it would be much harder for a court to dismiss EMF as a cause in a liability case.
4G protocol: LTE or WiMAX
4G uses the Digital Broadband Packet for the data services and Voice over Internet Protocol for voice communication, thus increasing overall throughput. There are two standards to provide high speed internet access at >100 Mbps (peak): (i) LTE (Long Term Evolution) and (ii) WiMAX (Worldwide Interoperability for Microwave Access). 4G supports multimedia conferencing, video phones, video-on-demand (VOD), streaming high definition movies, multimedia messaging, and graphically intensive online games. 5G will have giga-bit data services.

iPhone 5: LTE or 4G, Wi-Fi, Bluetooth, not NFC
iPhone 5 uses Long Term Evolution (LTE) or 4G, in three different band groups, based on 3GPP (3rd Generation Partnership Project) standards. It has Wi-Fi on 802.11n, with both 2.45 and 5 GHz. It also has Bluetooth 4.0, at 2.45 GHz with a range of about 50 metres. It does not have NFC (Near Field Communication) used for wireless money transfers and operating at 13.85 MHz with a range of up to 0.2 metre. Nor does it have wireless charging, like Nokia’s Lumia 920, according to BBC News on 12th September.

EE’s 4G in UK autumn 2012
EE, Everything Everywhere formed from Orange and T-Mobile, says that 4G will be available in 16 UK cities this autumn, according to the Daily Mirror on 12th September. New phones such as the Apple iPhone 5 will be able to access the internet five times faster than at present, downloading web pages in 0.25 seconds compared to 1 second on 3G, and 4 instead of 21 seconds per music track.

Everything Everywhere 4G – “sheer hell”
A comment on a Daily Mail article of 30th October: “Living with 4G is sheer hell! I want to leave my lovely home and area ASAP because I cannot stand the severe ear pains, burning skin, and head-pains that the 4G is causing. The 4G signal from EE penetrates the walls. 0.2 V/m on my pillow. No longer is my home a partly shielded sanctuary against the 2G and 3G, which were bad enough. Where can I go to escape from the 4G roll-out? EE offer Everything Everywhere as being safe and essential. It isn’t. It is sheer hell! I became electro-hypersensitive following the installation of 2G and 3G mobile-phone base stations near my home. I now cannot tolerate DECT phones, Wi-Fi, mobile phones either. There is absolutely nothing to recommend this technology. I cannot comfortably live in my home or enjoy the amenities. The 4G roll-out should be stopped immediately. EverythingEverywhere: your 4G technology is a living hell.”

Warnings on high levels of mobile phone radiation
This picture comes from Meri’s article on 22nd October on Towards Better Health, entitled “EM Radiation in our Parks”.

4G’s 800 MHz more bio-active
People may find the 4G signal particularly biologically active, according to EMFields news on 31st October, as “4G is like going back to the old-style 2G GSM that pulsed far more than the current system. It is the pulsing that is believed to be responsible for the biologically adverse reactions. The 3G signal has been ‘smoothed’ out since it first began transmission. The 800 MHz signals will penetrate building materials even further than the currently used frequencies. It is nearer the 400 MHz TETRA signals which have been so destructive to the health of many people.”
BT HOME-HUB HEALTH PROBLEMS

Complain to the ombudsman! – more unwanted radiation from BT Home Hubs

"I discovered the sneaky tactics of BT that mean BT broadband customers with a Home Hub are actually transmitting three wireless signals, not one: their own Wi-Fi and two BT Fon wireless signals 24/7. About a year ago, BT quietly updated all their Home Hub routers (via the phone line) to be automatically opted-in to BT Fon. Here’s how to turn it off on BT Home Hub 3, but check if you have a different model.

1. Opt out of BT Fon: www.bt.com/wifi/secure/status.do? This switches off the 2 open signals, but still allows you to turn your local Wi-Fi on and off. It takes up to 48 hours but you can do it in Power Saving mode - see 3.

2. If you occasionally use wireless, you can turn on/off your own signal here: http://bthomehub.home/html/common/advanced_login.html. You'll need your password on the plastic clip in the top back of the router, unless you changed it.

3. If you never/rarely use Wi-Fi, this turns off all wireless in your router, but wired connections still work: http://bthomehub.home (That's your router's homepage).

> BT Manual Power Save: [Configure] (If it asks for admin password, it's on the clip in the back of your router)

> Set BT Power Save mode enable: [yes]

> Power saving between: [12:00] and [12:00]

> [Apply]

If you're as furious as I am about it - the last year of my life has been a nightmare - then please complain to BT, and to the Ombudsman Service www.ombudsman-services.org/complain-now-communications.html."

BT HomeHubs help break safety limits?
Current international biological indoor safety limits are typically 0.02 or 0.2 V/m. A report from the London area with many new BT HomeHubs says: “from the increase in the WiFi signal recorded on an Acoustimeter (the WiFi signal sounds like, and probably is, a ticking time bomb), the uptake is considerable. The WiFi signal seems to be coming from several directions and the total radiation from all microwave sources in my bedroom now goes into the red at over 1 V/metre, despite having Pilkington K double glazing in metal frames). Most of the WiFi signal is coming through the 9inch brick walls.”

WIRELESS SMART METER HEALTH PROBLEMS

Refuse wireless smart meters!
Make sure you refuse all wireless smart meters. The government allows you to do so for health reasons.

Check your (wireless) meter – where’s the cancer warning?
There are reports from around the UK that some utilities are not being explicit in admitting the replacement meters they are offering customers actually have wireless radios built in. There ought to be a health warning if utilities are trying to persuade people to have Class 2B carcinogenic devices in or near their homes.

Wireless meters – recording every 5 seconds or 6 minutes
People are asking why the UK government wants such a vast amount of information which will pollute the environment if sent as EM radiation. The DECC’s “Smart Metering Implementation Programme: Functional Requirements Catalogue” of 30th March 2011, states, for electric meters (p.22): “The Smart Metering System shall support capture of consumption and demand data at 5 second intervals,” and, for gas meters (p.25): “The smart metering system shall support capture of gas consumption data at 6 minute intervals.”

(p.36): “The HAN interface shall support real-time (better than ten seconds, target of five seconds) two way communication from mains powered nodes.” (p.37): “The HAN interface shall support operation over the radio frequency physical layer. (Minimum requirement as the gas meter cannot have wires running into it.)"

DECC worried about heating dangers from wireless meters
It is odd that DECC is worried that wireless meters will heat people significantly. DECC’s report specifically mentions the heating limits promulgated by the private group ICNIRP. (p.42, 45): “Smart metering equipment, including the HAN, will be required to operate in compliance with guidelines published by ICNIRP." Heating, however, is highly unlikely. The majority of scientists are more concerned about the non-thermal effects recognised by the WHO’s IARC 2B carcinogenic classification.
Very high radiation in New Zealand – “absolutely stunned”
The September/October issue of Organic New Zealand (vol.71, no.5) had an article by Paul Waddell called “Electro-pollution from smart meters”. The author recently completed a certificated course at the Australian College for Environmental Studies in EMF Testing. He was called to test three wireless mesh meters fitted to the home of an electro-sensitive sufferer. There were very strong pulses at roughly 15 minute intervals at over 20,000 microW/m², the maximum which the assessment meter would read. This is far above the Building Biology Guidelines of slight concern at 10 microW/m² for sleeping areas and extreme concern >1,000 microW/m². A spectrum analyser revealed 8 successive pulses at 1,360,000 microW/m². “We were absolutely stunned by the extremely high level”. The author points out that the utility companies typically average emissions across the whole time even when the meters are not transmitting, “fooling people into believing the reading is very low when it is actually very high for a very short duration.”

Headaches from wireless meter
From a comment on Stop Smart Meters Australia dated 10th November: “I had my smart meter installed two weeks ago. Since the installation I have been suffering from severe headaches at night and a buzzing noise in my head. I contacted an electrician as the smart meter is located on the outside wall which is adjacent to my bedroom to enquire about having the smart meter moved but I was informed that I would have to pay over $2000. I am a pensioner and can simply not afford this. I am unable to move to another room in the house because they are too small. Please we need to action against these “Smart Meters” and their effects on people’s health!”

Wireless smart meter gives child ES symptoms
The Palm Beach Post on 10th November published a report on the health dangers of wireless smart meters. Early in 2012, Elke Lawrence wondered why her usually healthy 6-year-old son Alexander had been sick so much. Then she heard some people in a health food shop talking about how difficult it was to have the newly installed smart meters removed. “I went home and spent the next few weeks researching this. Millions of people have refused the new smart meters due to health and privacy issues,” Lawrence said. She found out that in late 2011 45 smart meters were installed at her condominium complex. “I had 45 meters right outside my door, which happens to be across from my son’s bedroom,” she said. In June Lawrence moved her son into another bedroom away from the meters, and he hasn’t been sick since. “I don’t want my son to be the guinea pig,” she said. She and others at the condo have persuaded 13 neighbours to have their meters replaced with the older analogue, non-radio, versions. About 19,000 of Florida Power & Light’s 4.6 million customers have refused the meters.

Sweden allows non-radiation meters
A contact in Sweden reports that they have an agreement with the power companies, backed by law, allowing you to keep an old mechanical meter. Each individual signs an agreement to fill in a signed form with meter readings or send an email, usually once a month. There is no extra charge, but some tariffs are not available. If you move to a new place and need the new meter to be replaced by an old one, you are sometimes charged the price of the mechanical meter, at about £200.

Fibre optic cables instead of wireless meters
A report by Donna Schill Cleveland on 20th September in the Fairfield Ledger stated that Carl Chandler, the water department superintendent of Fairfield, Iowa, proposed to halt implementation of radio-read water meters and to reimburse citizens for opt-out fees for the meters. Kevin Flanagan, the city administrator, presented a plan for a fiber-optic network to read the touch-pad water meters.

Armed men to enforce “radiation box attached to our homes”
A gang of three armed men arrived to remove a newly installed analogue meter from a house near Las Vegas, Navada, USA, according to a report on Fairfield Safe Meters of 17th September. Nevada Energy had installed a wireless smart meter on the bedroom wall of Mona Orkoulas in January 2012 without permission or notice. Mona, who did not have any history of medical problems, soon noticed an increased heart rate first thing in the morning and elevated blood pressure. She felt fatigued, started having headaches and found it difficult to sleep because of a low grinding sound. She finally realised the only change in her life was the radio meter, and found that others were experiencing the same effects from wireless meters.

Mona’s doctor wrote to the utility company: “Neurological and cardiological findings may be associated with pulsed EMF... EEG, ECG, MRI and sleep study changes may be associated in some hypersensitive individuals to pulsed EMF. If multiple Smart meters are in use in her area, the possibility of constructive and destructive interference between
the various EMF signals is a distinct possibility whose effects may be potentially more dangerous. I recommend that this patient be allowed to have NVE reinstall an analog meter at her house.”

Despite over six calls to the power company to put back the analogue meter without effect, Mona finally had a standard analogue meter fitted by an independent professional and photographed the readings on the old and new meter, to ensure she paid for every kilowatt-hour used. On 6th August three men from Nevada Energy, armed with guns, arrived unannounced on her property, removed the analog meter from the socket and the wireless meter she had had removed, and left her without electricity, accusing her of tampering with the meter, although she had repeatedly asked for the wireless meter to be removed. She was in tears and asked the men, “Why are you on my property with guns?” Their response: “This is procedure, Ma’am.”

More than a month later, she still had no mains electricity. “They’re not putting that thing back on my house,” Mona said, who had to use a gas generator. “Some of us eat organic foods, buy our nice bottled waters, exercise daily, but where is the point in all of this wellness when we are forced to have a radiation box attached to our homes?”

**Demonstrations against wireless smart meters**

On 4th October more than 35 demonstrations against smart meters were held throughout the USA and Canada.

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**SCHOOLS AND ILL HEALTH FROM WI-FI AND MOBILE PHONES**

SSITA - information on health dangers of Wi-Fi in schools

SSITA (Safe Schools Information Technology Alliance) is a UK Alliance of Partner organisations, parents, teachers, scientists, lawyers and other experts who work together to identify the issues and concerns regarding Wi-Fi and other wireless technologies in schools, nurseries, day-care environments and colleges. It tries to put people in touch with others in their own region or who are in similar circumstances. There is now a wealth of information which can be accessed from the SSITA website. To contact SSITA, please use either the “Contact us” form on the website or the telephone number. www.ssita.org.uk.

**Wi-Fi risks meeting in Cambridge**

A meeting to evaluate the risks of Wi-Fi in schools was held in Cambridge on 23rd October, with Prof. Olle Johansson, Dr Erica Mallery-Blythe and Dr Isaac Jamieson as speakers.

Israeli Deputy Health Minister supports ban on school Wi-Fi

Rabi Yaakov Litzman, the Deputy Health Minister, sent an official letter to the Education Minister, Gideon Sa’ar, asking him to suspend immediately the installation of Wi-Fi in schools owing to the health hazards of EM radiation, according to the Times of Israel on 23rd August. This followed a letter he received from attorney Michael Bach threatening a petition to the Supreme Court. Litzman wrote “I fear lest the day come when we shall rue the irreversible damage visited on our children.” Some countries such as France have banned Wi-Fi and any kind of wireless communication in schools.

**Dangerous schools - Canadian problems**

A report from Felicia: “My friend’s son has heart palpitations at the age of 12 and needs a heart monitor and his school has several commercial grade multiple antenna Wi-Fi routers. When he is at home, his heart has a regular rhythm. My naturopath’s daughter sat under a commercial grade multiple antenna Wi-Fi router at school for a year and became dizzy, nauseas, anxious, had ringing ears, headaches, and was light-headed, which are all classic symptoms of over exposure to microwave radiation. They had to home school her and ultimately move to a remote location away from multiple forms of microwave radiofrequency radiation.” The Toronto school board now has defibrillators in every high school because of the risk of heart attack for students.

**Phone masts removed by school director suffering “migraines and gradual memory loss”**

Daily News and Analysis published a report on schools removing phone masts on 27th September. The Swami Vivekananda International School in Kandivli and Gorai in India has removed phone masts from their premises. The decision was taken by Yogesh Patel, the school’s director, who said: “I began suffering from migraines and gradually memory loss. If the radiation had such a powerful effect on me I can’t imagine the damage on children. So we decided to remove the towers from the school building.”
POLITICS AND HEALTH

Council of Europe, Parliamentary Assembly: resolution 1815 (2011) – create “wave-free areas”
8. The Assembly recommends that the member states of the Council of Europe:
8.1. in general terms:
8.1.1. take all reasonable measures to reduce exposure to electromagnetic fields, especially to radio frequencies from mobile phones, and particularly the exposure to children and young people who seem to be most at risk from head tumours;
8.1.4. pay particular attention to “electrosensitive” people who suffer from a syndrome of intolerance to electromagnetic fields and introduce special measures to protect them, including the creation of wave-free areas not covered by the wireless network.

EU Health Commissioner resigns
John Dalli, the EU Commissioner for Health and Consumer Policy, in charge of SANCO and SCENIHR which still holds to obsolete heating limits, resigned in October after allegations of attempted influence by a Malta company over a tobacco issue.

EU in muddle over CFL mercury poisoning, UVA and UVC
The EU Directive 2002/95/EC (RoHS) prohibits mercury in electrical equipment, but apparently CFLs are exempted. There is no compulsory warning on CFL bulbs about mercury dangers, so people are suffering mercury poisoning if they do not deal with a breakage correctly. The European Commission Regulation (EC) No 244/2009 (paragraph 12) states: “The ecodesign requirements should not affect functionality from the user’s perspective and should not negatively affect health, safety or the environment.”

A new study (Mironava T et al, Photochem Photobiology, 2012), found significant levels of UVC and UVA (mercury [Hg] emission lines) appearing to originate from cracks in the phosphor coatings, present in all bulbs studied. Skin cells reacted to CFLs like UV. The team observed only UVA and UVC emission since mercury has no emission in the UVB range. Professor Rafailovich wrote: “Defects in the coating are in fact ubiquitous, and the potential for exposures to harmful levels is always present.”

EU notified of RF problems from CFLs in 2011
A written question to the EU Parliament on 11th April 2011 by Marielle De Sarnez (ALDE) (E-003593/2011) on the subject of “Hazardous low-energy light bulbs” stated that “Recent studies carried out by the Consumer Safety Commission (CSC) and the Environment and Energy Management Agency (ADEME) — two French bodies renowned for their expertise — have shown that low-energy light bulbs, which are to replace all light bulbs in Europe by 2012, bear considerable risks. The strong radio waves emitted by the bulbs mean that, in the higher frequency range, the permitted limit values (27 volts/metre) are exceeded in the immediate vicinity. The values only return to normal (about 0.2 V/m) at a distance of about one metre. This is a problem in the case of bedside and desk lamps.”

USA undecided over CFLs
The USA was due to ban incandescent lamps on 1st January 2012 (the Energy Independence and Security Act). Although the law was passed, no money was made available from Congress for the Department of Energy to implement it. It is said that in the autumn of 2012 incandescent bulbs were still for sale in many small shops, but not in large stores.
Scottish Power and Cancer Research UK

Scottish Power has announced that its principal charity partner for the next three years is Cancer Research UK. Their literature does not seem to mention that it was discovered in 1979 that power lines are linked with cancer or that wireless smart meters use radiation which is classified by the World Health Authority’s IARC as 2B possible carcinogenic. Cancer Research UK is well known for playing down any risk from mobile phones and power lines and providing reassuring comments to the media. Their website states: “Cancer Research UK has a dedicated team who work closely with individual donors and charitable trusts and foundations giving £10,000 or more.”

UK parliament on PLT -
“the pollution of the 21st century”

On 18th May 2011 Mark Lancaster, MP, raised the issue of radio transmissions from Power Line Technology devices. Experts “can walk down the street with a radio and pinpoint which households are using PLT devices just from the noise emanating from the buildings. We are talking about the pollution of the 21st century. In previous centuries, we have fought smog with campaigns for clean air, and now we are seeing a battle for clean airwaves.” He referred to EN 22022, the EU standard to control PLTs and the ERA test report showing that PLTs exceeded by 30 dB (= 1,000 times) the interference power permitted by any other domestic product. Jim Shannon, MP, asked whether local government had an enforcement role in responding to health and safety issues. Mark Prisk, the government minister, said responsibility for enforcement was divided between Ofcom for amateur radio and the BBC for commercial broadcasts. Since October 2011 the new standard is EN 55022:2006+A2:2010. Typical frequencies are 2-28 MHz and 200 Mbps. New PLTs operate up to 300 MHz and 1 Gbps, but at -80 dBm/Hz compared with -50 dBm/Hz of the older systems. Internet ADSL 2+ operates at up to 2.2 MHz, thus with a small overlap with PLTs. The PA Consulting Group report of 2010 did not investigate the known bio-effects of wireless exposure.

USA suppressed research –
“a grand experiment”

Allan Frey, in an article in The Scientist of 25th September 2012, reports how his discovery in 1975 that weak microwave exposure opens the blood brain barrier (BBB), was denied by a contractor for the Brooks Air Force Base who claimed to replicate his experiment for 2 years. Eventually the contractor was forced to admit they had not replicated Frey’s work. In addition to actively suppressing results of microwave-bio research, he says the Brooks group also attempted, mostly with success, to block funding for such research in the first place. After the published evidence for very low intensity microwaves opening the BBB, the Department of Defense issued a negative report on the dangers, written by a psychologist.

Largely as a consequence of this report, funding for open microwave-bio research in the USA was essentially shut down. Frey concludes: “This suppression of research has now made hundreds of millions of people subjects in a grand experiment that may involve their health, without their informed consent, and the outcome of which can have substantial medical, legal, and economic consequences.”

EM soup “overlapping the human nervous system”

Dr Michael Persinger, a neuroscientist at Laurentian University and expert on EMF effects on cancer cells, in an article called “Electromagnetic War on Humanity” by Zen Gardner on 24th September in Wake Up World, said: “For the first time in our evolutionary history, we have generated an entire secondary, virtual, densely complex environment — an electromagnetic soup — that essentially overlaps the human nervous system.”

Scientist fired: evidence threatened profits

“When a forecaster at a radio station in California predicted rain he was fired. The management tried to persuade him to make the forecast sunnier because they were sponsoring an outdoor rally that day and when he refused he was sacked. In fact, it rained on the day.” (The Times of London on 11th October)

Italian officials jailed for “no danger” reassurances

Seven officials were jailed at L’Aquila, Italy, for wrongly reassuring the public about the risk of an earthquake at a meeting of the National Commission for the Forecast and Prevention of Major Risks six days before the earthquake in 2009 which killed 309 people, according to the Times of London on 23rd October. Two said at a press conference that there was nothing to fear, despite recent tremors, and one said on TV that there was “no danger” and residents should sit back with a glass of wine.
Japan Bar Association’s opinion
The Japan Federation of the Bar Association (JFBA) has published a written opinion about EMF issues, available in Japanese on their website. JFBA recommends that government should take measures for people with EHS such as to make an area in public transport free of mobile phone use to meet human rights.

Japanese university symposium
On 10th June 2012 the Japanese Association of Environmental Studies held a symposium in Beppu University, Oita, related to health problems due to environmental pollution from mobile phone base stations. Yasuko Kato, director of the Japanese EHS group, reported on the difficulty of life for EHS persons in “Reported functional impairments of electrohypersensitive Japanese: A questionnaire survey”, published in Pathophysiology.

Mast causes ES symptoms – now removed
In April 2010, at the Japanese Federation of Bar Association’s EMF symposium in Tokyo, Dr Sinjou, physician, presented a health survey done in an apartment block where there was a 2G 800MHz mast in 1999, and 3G 2 GHz mast in 2009, removed following his request in 2009. Dr Sinjou and his wife have done a health survey again after it was removed. During the 2G mast, there were 49 ill-health cases, such as dry eyes, nosebleeds and floater. After 3G was added, health problems increased to 121, such as fatigue, mental derangement and irritation. After both masts were removed, however, health problems decreased to 22, suggesting there is a serious health effect from phone radiation.

Brain cancer doubles
Cases of glioblastoma, the most malignant type of brain cancer, has almost doubled in men over the last 10 years, according to the Danish Cancer Society as reported in Microwave News on 8th November.

Another mast causes ES symptoms – now removed
A 20m NTT Docomo phone mast in Kawanishi City, with 877.5MHz and 2132.6-2147.4 MHz, was erected in December 2005. Since the land slopes gently, many houses were nearly the same height as the mast. Many residents complained of health problems, such as headaches, sleeplessness and tinnitus. Residents brought a case against the operator and the landowner, demanding a stop to the radiation and cancelling the lease contract. The operator, therefore, stopped the radiation in April 2008 and removed the mast. After the radiation stopped, the health of all residents surveyed improved.

Mobiles not allowed near ES on trains
Sapporo City Subway used to ban mobiles on trains, but they will change the rule by this spring. The new rule is to turn off a mobile phone near a priority seat. ES people are affected by a mobile’s radiation even a few meters away. Sapporo City said: “We know about Electromagnetic Sensitivity, but there are many people who want to use mobile phones.”

Wi-Fi exceeds limits on Italian trains
A survey by the consumers association Condacons on Italian Frecciarossa trains and high-speed NTV trains, found that Wi-Fi on the trains exceeded the limits set by law by 588% and 6,800%, according to Telecom Paper on 10th October. Condacons has presented a complaint to prosecutors.

Tokyo EHS peace walk
On 24th March 2012 there was an EMF symposium in Tokyo with a peace walk, to raise awareness of EHS and EMF problems
Shiota family EHS protest walk
From 12th to 23rd August the Shiota family made a 215 km walk from their house in Nagano district to protest to the NTT Docomo office in Tokyo. They have been joined by a city council member and others.

The family became ES when a mast was built on the mountain 250m away from their house in 1999. The family had many symptoms, such as itch, headache, vomiting, tiredness and eye-ache. Even malformed dandelions and other flowers appeared. They had to move to a low EMF area and built a new house in 2004. But, in May 2012, they knew NTT Docomo was planning to construct a mast in this area. On 5th July, Ms Shiota and her daughter handed in their request to keep a free EMF area near their house. But, NTT Docomo constructed the base station after 8 days, and began operation from 26th

Pets become ES and die after phone mast is activated
From a posting by the author Gillian Lyden on T13 on 28th September:
“People in my village have suffered appalling symptoms since a phone mast was activated: two animals, a dog and a cat, were ill and died of cancer within two years of activation. Since then five more have died with the same symptoms – restlessness, making distressed noises and throwing up orange vomit. 100 metres away two more dogs died of cancer; their family moved away and I heard recently that the father also died of cancer. A friend of mine, who lived about 30 metres from the mast, died of cancer. Insomnia was the first symptom, plus headache, nausea and dizziness, earache and tinnitus, nosebleeds, raised blood pressure, stroke and heart attack, sore itching bloodshot eyes, ulcerated mouth and throat, etc.”

Court bans mast because of bees
A court in Zutphen, Netherlands, annulled a permit for a KPN UMTS antenna allowed by the Winterswijk municipality in 2010, according to the Telecompaper on 5th November. Five local residents appealed. One of the residents who keeps bees around 80m from the proposed site referred to research in Germany and Switzerland on the effects of EM radiation on bees. The court found that the city did not show there would be no negative consequences from the mast.

No green world “in a few years”?
Scientists in Gujarat have studied the harmful impact of 900 MHz at 1.9 mT for 72 hours on tulsi and spinach, showing a decrease in growth rate, with leaves becoming more brittle and falling off early, according to the Times of India on 7th October. “There is a decrease in assimilatory pigments like chlorophylls and anthocyanins which shows decrease in photosynthetic rate in plants. At the same time, the carotenoid pigment content increased which resulted in the aging effect.

Protein content of those plants which were exposed to radiation had fallen drastically. If plants and trees are not taken care of, then it would be unrealistic to think of a green world in a few years,” Ved Vyas Dwivedi said. They aim for an awareness campaign.

India: phone masts at least 1 km away to save wildlife
Phone masts within the Gautam Budh Nagar forest department must be at least 1 km from wildlife sanctuaries, following a ministry directive aiming “to avoid and mitigate harmful effects of EM radiation”, according to the Times of India on 15th November. Existing masts may need to be removed.
nanoTesla DNA evidence could explain cancer and EHS: “extraordinarily impressive” “the Rosetta Stone”

Microwave News on 27th September reported a study by Paul Héroux, professor at McGill University in Montreal, with Ying Li, on how cancer can be controlled. It is based on “impressive” evidence of magnetic fields changing DNA at 25-50 nT. Since some ES people can sense well below this level, as can birds and animals, this evidence seems plausible. In fact a recent study (Hu JH et al, Int J Radiat Biol, 2010) showed that 1-5 nT magnetic fields suppressed the growth of melanoma cells in mice.

A microscope for karyology, or counting the chromosomes, shows that healthy cells have 46 chromosomes, whereas cancer cells have more, called hyperploidy, as in Down’s syndrome. A magnetic field of 60 Hz at 25-50 nT for 6 days, however, reduces the number of chromosomes (karyotype contraction), usually by ≥10%, for several cancers, e.g. breast, lung, colon and leukaemia. There are three features: (i) after three weeks in the field, the number of chromosomes returns to baseline numbers; (ii) once adapted to the magnetic field, the cells become sensitive to further MF variations with ± 10 nT prompting further karyotype contractions; (iii) the karyotype contractions vary little from 100 to 500 nT, with no dose-response.

Héroux and Li theorise that 25-50 nT affects the rate of quantum proton tunnelling through water channels in ATPS, leading to more or fewer chromosomes. Li Y et al (Tumor Biol, 2012) showed that the antibiotic oligomycin, like a mix of melatonin and vitamin C, impairs the action of the enzyme ATPS, leading to karyotype contraction. 25 nT could alter the structure of water impairing proton tunnelling, as shown by Semikhina and Kiselev in Moscow State University over 20 years ago, and Wang Y et al (J Am Chem Soc, 2012).

Dr D. Carpenter, director of the Institute for Health and Environment at the University of Albany, praised the cell line work: “It is extraordinarily impressive. It’s first rate and deserves major attention.” Héraex said: “We think we have the Rosetta Stone that will allow us to unravel the intricacies of cancer physiology.”

Microwave News commented: “The cells’ sensitivity to magnetic fields following repeated exposure could also lead to a breakthrough in explaining the physiological basis for electromagnetic hypersensitivity. After all, as Héraex told us, “We have no reason to believe that the ATPS of normal cells is not affected by the fields, though we think that cancer cells are more susceptible because of their enhanced metabolism.” Perhaps this is why several scientific journals refused to print his paper. It was published on Cornell University’s arXiv on 27th September.

Replace SAR with DNA damage measurements

Researchers at Columbia University have proposed a new method of assessing mobile phone safety that would measure not the energy emitted by the device, but actual effects on DNA biochemistry, according to Dr Mercola’s newsletter on 7th November. The paper (Blank and Goodman, Electromag Biol and Medic., 2012) proposes a biologically based measure of EMF radiation to replace the energy-based “specific absorption rate” (SAR). This involves the documented changes in DNA biochemistry that arise from interactions with EMF. Camilla Rees of ElectromagneticHealth.org said: “A DNA approach to risk would not only be more revealing in terms of cell phone radiation’s effects on biochemistry, but it has the added advantage of being able to be applied across a wide range of frequencies.”

Mobile phone damage worse than gamma radiation

Dr. Devra Davis reports that Lai & Singh showed DNA effects in 1994 and shows photos of two cells, one with DNA damaged by radioactive “gamma” radiation and another damaged by low-level pulsing non-ionizing radiation from a cell phone. She says the DNA from the cell exposed to the cell phone radiation looks worse. (www.youtube.com/watch?v=7HK-5wjA0ww from 13 minutes). Brain tumours after the atomic bomb of 1945 occurred 40 years later, but increased brain cancers from mobiles have started after just 10 years.

Health dangers of radiation – “terrifying”

Dr. Leif Salford, chairman of the Department of Neurosurgery at Lund University Hospital, Sweden, who has researched RF radiation effects on the brain since 1988, called the potential implications of some of his research “terrifying”. The results were consistent and worrisome: radiation, including that from mobile phones, caused the blood-brain barrier, the brain’s first line of defense against infections and...
toxic chemicals, to leak. Researchers in 13 other laboratories in 6 different countries had reported the same effect. In animals exposed to a mobile phone, up to 2% of the neurons in all areas of the brain were shrunken and degenerated. He said: "We have good reason to believe that what happens in rats' brains also happens in humans." A whole generation of users of today's teenagers may suffer negative effects, perhaps as early as in middle age, according to Marco Torres in Signs of the Times on 18th September.

Dr Salford refers to low-level windows of effects, with the worst BBB leakage at 0.001 W/Kg, at passive exposure of 1.85 m from the mobile phone, or 195 metres from a mobile phone mast: www.youtube.com/watch?v=E_WJ_aJPWIA.

Dizziness from magnetic fields
Magnetic fields from MRI can induce vertigo, probably by Lorenz forces on the inner ear (Roberts DC et al., Curr Biol., 2011), according to the Huffington Post on 22nd September.

Computers make food unhealthy
A study by the University of Human Ecology, Ukraine, shows that a computer's EM field destroys the molecular structure of water and food left for a while nearby, making them harmful to health. "Water becomes 'aggressive', changes its structure and ends up being harmful to the human body," Mikhail Kurik said. According to doctors, the negative impact accumulates in the body and can develop long-term disorders such as Alzheimer’s or Parkinson’s, as reported on 13th August by MCS America.

Male fertility damaged
10 GHz microwave radiation for 2 h per day for 45 days at 0.21mW/cm2 and SAR 0.014W/kg damaged the fertility of exposed male rats (Kumar S et al, Int J Radiat Biol. 2012).

GSM stress and delayed effects
A single exposure for 2 hr at 905 MHz (GSM) increased anxiety and reduced locomotor activities in female rats, and reduced orientation and exploration activities and increased glucocorticoid levels and antioxidant system activity in females and males. Delayed effects were also observed in both sexes 1 day later. (Khirazova EE at al, Bull Exp Biol Med. 2012).

Heating danger of most mobile phones, especially for children
A new study (Gandhi OP et al, Electromagn Biol Med., 2012) shows that mobile phone SAR ratings underestimate exposure, according to Jimmy Downs in Food Consumer on 15th September. Many users, therefore, particularly children, are exposed above the heating limit, quite apart from the much lower biological limit for long-term effects like cancers and neurological problems.

The Specific Absorption Rate (SAR) in the EU is ICNIRP’s heating limit of 1998, 2 W/kg averaged over 10 grams, while the USA’s FCC in 1997 and Australia in 1998 adopted the stricter 1.6 W/kg averaged over 1 gram. 4 W/kg is apparently accepted as the threshold for heating effects (Li L, et al, AEM2C, 2010). The current international biological safety limit is 0.00033 W/kg, consistent with ICNIRP and IEEE/FCC, and for long-term exposure is 0.00033 W/kg (33 μW/kg) (Seletun, 2010).

SAR values are measured with a plastic model called the Specific Anthropomorphic Mannequin (SAM), which represents the top 10 % of US male military recruits in 1989. People with smaller heads, however, like children, receive comparatively higher exposures in actual SAR, above the SAM-derived value. Another factor is the fluid used in the SAM model, which is not representative of differential absorption of specific brain tissue, nor absorption in children or smaller adults. The real SAR value for a 10-year old is up to 153% higher than that the SAM model indicates, and for electrical properties, a child’s head’s real absorption can be above two times greater, and the skull’s bone marrow absorbs ten times more than adults.

The study says a new certification process is needed for different modes of use, head sizes, and tissue properties. A model with all these factors is likely to show that no current mobile phones meets the safety limits for children and adults with smaller heads, and many mobiles are not safe for some adults either.

MS as an electrical disease
Canbay (PIER (Progr in Electromagn Res.) 2010) shows how the prevalence of MS in industrialised societies also relates to areas with high natural electric fields from lightning strikes and cloud cover. This leads to greater dielectrophoretic forces which can separate protein lipids from nerve cells in brain grey and white matter, relevant to MS which is a demyelinating neurodegenerative disease. The parts of the body which show the largest electric field gradients relate to similar diseases such as leukeamia, Alzheimer’s and Parkinson’s, with peaks of bio-effect on myelin from a dielectrophoretic force at about 50 Hz and 50 GHz.
Methanol and formaldehyde – demyelination, MS and immune diseases

Professor Woodward Monte wrote “While Science Sleeps: A Sweetener Kills” about the artificial sweetener aspartame in 2011, and explained the dangers in an interview published by Dr Mercola on 11th November 2012. Methanol, renamed in 1892 from methyl alcohol (in Greek methy = wine, hyle = smoke), is a small molecule which infiltrates cells which then turn it into formaldehyde, although in some animals it is metabolised into formic acid. Formaldehyde is an undetectable class 1 cancer agent. It damages proteins which are then destroyed by macrophages, found in damaged areas of Multiple Sclerosis patients. Within a cell formaldehyde stops APT production. Formaldehyde can be detected by increased methylation and decreased phosphorylation, the mechanism for producing APT. When methanol crosses the blood brain barrier it leaks from blood vessels and destroys nearby myelin. Some MS sufferers are also ES, perhaps through demyelination.

Methanol poisoning has symptoms similar to MS and is related to many immune diseases of civilisation involving methylation, such as Alzheimer’s, autism, breast cancer, lupus, rheumatoid arthritis and melanoma. Ethanol, perhaps through a small intake of alcohol, can reduce the effects of methanol, which may otherwise have a response delayed by 10-20 hours and can cause symptoms in, say, the early hours of the morning. Methanol comes from aspartame found in diet drinks and many processed foods. Other things to avoid in large quantities are: smoking tobacco, smoked foods, fruit or vegetables in cans/tins (introduced for Napoleon in 1807) or glass containers or tetra packs, packaged tomato sauce, blackcurrants (but good in other ways) and chewing gum. Fresh fruit or vegetables are good because the methanol is strongly bonded with pectin which prevents separation and the production of formaldehyde. In contrast aspartame has a very weak bond with methanol. Rotting fruit should be avoided because of high levels of methanol.

MS was first described in 1818 and the link between methanol, sugar and MS was made in 1967. MS is more common in northern latitudes, perhaps also linked with reduced sunlight exposure. It is highest in Scotland and the Shetland islands, both of which have peat and trees for smoking fish. The Faroe Islands, however, with no trees and only dried fish, used to have almost no MS, until troops arrived with cigarettes and tinned food.

ES STORIES

“Confined to a cage”
– “a living hell”

The Daily Mail on 21st November had a long report entitled “Woman, 51, spends up to 18 hours a day confined to a cage as she claims it protects her against allergy to modern technology.” There were eight pictures and a 6-minute online video of Velma Lyrae explaining her condition. She suffers agonising head and nerve pain, memory loss, tinnitus, heart palpitations, vertigo and aching joints if she goes anywhere near technology. She can’t use a mobile phone, satnav or WiFi, or even use a hairdryer. Instead she spends her time reading, doing artwork and writing letters from inside her Faraday cage.

Velma’s condition emerged with the arrival of 3G mobile phones, although she believes a previous electric shock made her more susceptible. As a teenager she suffered a shock when she touched the switch of an electric fire in her bathroom. At first the symptoms were barely noticeable but they have become progressively worse over time.

Now unable to work, Velma is forced to spend every day in a makeshift Faraday cage in her flat in Blackheath, London. Velma made the cage from second-hand material at a cost of £300, instead of £800 for a new one. She said: “I can’t do everything that normal people do without my symptoms showing. I have to do everything in my cage - eat, sleep, read and write. I always wear a shielded scarf round my head when I leave the house to protect myself from radiation signals. It’s made my life a living hell.” In the Scottish Sun, which like Yahoo News also ran the story, Velma said: “I’ve been to my GP countless times begging for tests, but they say there’s people worse off than me and do nothing. It is so frustrating that medicine isn’t keeping up with the technology. Independent experts say in five years’ time 50% of the population could be affected at current exposure levels.”

Velma worked as a secretary in the 1980s but was forced to quit her job. She said: “Even back then I could feel a huge agitation when using the computer, but I thought it was just because I didn’t have the technological skills. Now I know that I was starting to feel the symptoms of my EHS. I don’t have a job and my social life is non-existent. My friends are very supportive but there’s only so much time you can spend with the woman that
can’t go anywhere or do anything. I used to love going to festivals and experiencing live music, but because everyone has a mobile I can’t even go near a gig now. The last gig I went to was Radiohead. I knew I was getting worse and wouldn’t be able to go to any more so I wanted to make it a good one. It’s so sad that I can no longer do the things I enjoy. It is so frustrating that medicine isn’t keeping up with the technology. We desperately need a white zone - an area where there’s little or no emissions - where we can go to relax and recuperate.”

Dr Erica Mallery-Blythe, a medical adviser for the charity ElectroSensitivity UK, said: “The symptoms of EHS can cover a broad range of systems, often start subtly and can be mistaken for other medical conditions. Adults and children today are exposed to very high levels of electromagnetic fields (EMF) that no life on the planet has ever witnessed before. It is no surprise that the numbers of those with EHS and other conditions linked with EMF exposure are rising.”

“ES from phone masts in Hampstead – “like trying to function without a brain”

On 11th October the Hampstead and Highgate Express, in an article headed “Heart scare collapse is blamed on phone masts”, reported that Ms Dyson Turnbull, a 62-year-old photographer in Hampstead, blamed her failing health on the “forest of phone masts” sprouting up in Hampstead, saying another mast could force her to move away for good.

She was once a pioneering photographer, inventing a technique known as solar spectrum photography, capturing a range of colours without the use of filters. But her condition forced her to abandon her passion. She says that some electrical signals cause her to collapse and she is forced to avoid Hampstead Police Station and certain shops in the village due to the pain the signals cause her. She was even rushed to the Royal Free Hospital in fear that she was having a heart attack.

“The masts can be diabolical on your immune system. It makes you feel very, very old very, very quickly. It’s like rheumatism. When I walk past certain masts, they make me want to fall to the floor. It’s putting me in a position where I stay in Hampstead and die or move somewhere without so many masts. This condition is like trying to function without a brain.”

Subsequent letters published by the paper on 18th and 25th October gave further examples of people whose lives had been ruined by masts and the suggestion that, in the light of the Italian supreme court ruling that mobile phones can cause brain tumours, people in the UK should be able in future to object to phone masts on the grounds of health.

Sensitised by Wi-Fi – “a vast experiment from which there is little escape”

In an excellent article in the Ecologist on 19th September, “Is your smartphone damaging your health?” Lynne Wycherley explains the growing evidence of harm from EM radiation and her own discovery.

She wrote that ten years ago a knee problem compelled her to carry very little, with barely more than a bus fare in her pocket. While friends forever checked for mobile phone messages she was carefree. Then two years ago, still phone-free, she fell deeply ill. Month after month she was void of sleep, with dizzy, brain-burnt days. No herb or prescription brought relief, and nor did CBT (cognitive behavioural therapy). Bewildered with exhaustion, and having lost her job, she began to question the presence of technology in her life. When had Wi-Fi arrived in her workplace? Answer: just before the illness, and just before Wi-Fi arrived in her house.

Intrigued, and knowing that Wi-Fi uses pulsed microwaves, she hired an acoustic detector: Wi-Fi’s fierce pulse could be heard throughout their house. When it was switched off, though her dizziness eventually began to ease, what remained was the high whine of mobile-phone towers. Shockingly, the highest microwave radiation was in their bedroom. She took immediate action. By night she shielded herself in a metallic mesh; the detector fell silent. She slept like an infant. Even better. Years of poor-quality sleep, followed by none, simply melted away.

“My ‘cage’ mimicked the world we were born into – when human beings first walked the Earth, singing their praise to the stars, background radiation was low. Today, in the words of Olle Johansson of the Karolinska Institute in Sweden, “you are sitting in levels (3G) that are approximately one million billion times above natural background... Therefore you must ask yourself, do we through evolution have a microwave shield built into our bodies? ...of course we don’t.”
According to Mast Sanity, there are more than 52,000 masts in the UK. We wade through a sea of microwaves, its currents augmented by Wi-Fi and cordless-phone stands that pollute our neighbours as well as ourselves. And so, not surprisingly, increasing numbers of people are struggling with symptoms.

“Though the European Environment Agency has called for less exposure and far more caution, such wisdom is lost in the stampede. Insects, plants, birds, ourselves: we are all caught in a vast experiment from which there is little escape. Isn’t it time to decry this and rebel? To seed and share awareness? Starting now.”

“I turned into this old frail man overnight” – “sceptics and government need to do their homework”

The Record on 29th October reported in Canada that Howard Kalnitsky started experiencing heart problems 15 years ago aged 34. After years of medication, he now says he’s affected by electromagnetic hypersensitivity, a nervous system reaction to wireless radiation from mobile phones and other technologies. “My wife said that I had turned into this old, frail man overnight,” Kalnitsky said. Kalnitsky unplugged his wireless internet, mobile and cordless phones for a few days. The difference was drastic. “The next day after I had disconnected, I felt different, I felt energy,” he said. “I’ve been perfectly healthy with no arrhythmia for more than a year.”

Judi Francioso of Cambridge said her family suffered headaches, heart palpitations and other symptoms after a smart meter was installed at their home in June 2010. She wants people to take the problem seriously. “We sufferers sound pretty stupid talking about this when no one else can feel this,” she said. After being diagnosed at Bray’s clinic, Francioso fought for months to have her smart meter replaced with one connected to a land line.

Kalnitsky’s doctor, Dr Kathleen Debrowsian, declined comment to The Record to confirm his diagnosis. The Women’s College Hospital Environmental Health Clinic in Toronto is one of the few places to provide electromagnetic hypersensitivity diagnoses. Dr Riina Bray is medical director of the clinic and sees about 50 patients per year she says are affected. “Maybe 1% of the population (is affected),” she said. “We really don’t know.” Bray said sceptics and government need to do their homework. “It’s a real thing,” she said. “It’s not a psychological problem.”

Dr Magda Havas, associate professor of environmental and resource studies at Trent University in Peterborough, who has researched electromagnetic hypersensitivity for two decades, said: “This issue is not going to go away. It’s going to get a lot worse.” Children, the elderly and those with weak immune systems are more likely to develop symptoms, Havas said. Symptoms include everything from headaches, trouble concentrating and difficulty with short term memory to heart problems, mood disorders and anxiety.

“There is no indication that technology such as Wi-Fi and cellphones represents a health concern,” claimed Dr. Hsiu-Li Wang, associate medical officer of health with Region of Waterloo Public Health, Canada. [This claim was made over a year after the World Health Organisation classified radio frequency used by Wi-Fi and mobile phones as a 2B carcinogen. –Ed.] Health Canada considers 10 million microW/m2 emitted constantly as safe. Countries like Russia have much lower thresholds. Peter Braid, MP for Kitchener-Waterloo, said: “I certainly empathize with the symptoms that (Kalnitsky) is reporting.”

Dr Carlos Sosa MD – “like a burning candle in my head”

Excerpts from an article dated 2008 on www.electrosensitivesociety.com/2010/06/01/the-dr-carlos-sosa-m-d-story/

I am a physician and surgeon presently living in Medellin, Colombia, in South America. In May 2006 I was forced to leave my house because of the symptoms caused to me and my family by the microwaves of a Wi-Fi antenna in our building for nearly three years. In May 2006 I started feeling a terrible sense of unwellness: headaches, dizziness, insomnia, nausea, irritability, amnesia or forgetfulness and lack of attention or concentration capacity. I couldn’t bear being close to my house or to any other microwave mast, be it cell phone or Wi-Fi antennas. I had to leave my house together with my whole family just to find out that the city was flooded by some 4000 masts.

I could sense the EM fields that were being given off by these antennas blocks away, before I could even see them. Many times I felt like a burning candle in the back part of my head (occipital). We had to move to five different apartments all over the city because the situation was the same no matter where we went. I couldn’t find physical or mental peace anywhere in the city. I couldn’t study again which, being a medical doctor, is a tragedy. Studying is my life and I wasn’t able to remember or to concentrate. I had to resign my position at the hospital where I worked because there were various microwave cell phone

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Airline pilot - no “places to hide”
The Canadian Star on 17th October had an article with the title “Airline pilot has nowhere to escape from wireless radiation”. It reported that Melissa Chalmers, a professional pilot of 20 years’ experience, is electrosensitive, especially to mobile phone masts. She has moved twice in 10 months to escape wireless radiation and worries she is running out of places to hide. Chalmers, who lives near Grand Bend on Lake Huron, said: “They have put a tower up down the road. I’m just waiting for it to be turned on and then I will probably have to leave the home.”

Chalmers first noticed, about 2½ years ago when she lived in London, that the nausea she felt when she was in her apartment subsided when she left. Cellphones, cellphone towers, wireless internet routers, cordless phones and power lines have all been recognized as possible contributors to EM hypersensitivity (EMS), which is caused by significant exposure from radio waves. EMS symptoms include poor sleep, fatigue, headache, nausea, dizziness, heart palpitations, memory impairment and skin rashes.

Dr. Riina Bray, medical director, Environmental Health Clinic, Toronto’s Women College Hospital, is a leading physician on EMS and its symptoms. “I’m just basically seeing more and more folks with electro hypersensitivity . . . there is a small fraction of the population who are hypersensitive and the WHO (World Health Organization) supports that phenomenon as being real,” she said. “With the continuous onslaught of this stuff in our society it is very hard for these folks . . . to get better faster.”

“If I have to move again,” Chalmers told the Star, “it will be three times since Christmas, so I am getting pretty tired of moving and I really don’t know where I am going to go at this point.” Critics say if Industry Canada, which has total control over telecommunications, has its way there will be no place for people such as Chalmers to live. Industry Canada did not respond to a Star request for an interview. Bray said the public should not have to prove harm. “It should be done by industry and government,” she says.

Industry Canada has apparently told municipalities trying to control the number and location of masts it would block any attempt to usurp its powers. The municipality of Lambton Shore near Lake Huron considered making Port Franks, into a community free of wireless radiation, as did Oakville when it introduced its own protocol calling for a 200-metre setback. Frank Klegg, a retired Microsoft Canada president, who is now head of Citizens For Safe Technology (C4ST), said: “I went to that meeting in Oakville where it was discussed and it became very clear from Industry Canada and Health Canada that they were not going to change, they were not listening. They were there to dictate.” Klegg said C4ST wants to work with the federal government to establish so-called white zones across the country where people who are sensitive to wireless radiation can seek refuge.
It's an excellent introduction to what ES is, with notes on its symptoms and causes. Give it to your relatives and friends, or anyone interested.

Copies are available on the ES-UK website and from the ES-UK BM Box address on this page.