



## **Mast Sanity Press Release 16th September 2009** **HPA Wi-fi 'Research' is Pure Spin**

Nearly 2 Years ago Mast Sanity welcomed the announcement from the UK's Health Protection Agency (HPA) that more research was to be done into Wi-Fi<sup>[1]</sup> after Sir William Stewart requested an enquiry into Wi-Fi in schools.<sup>[5]</sup>

However we believed at the time that this 'Research' was merely a smokescreen, to appear to be doing something without actually doing anything new.

And so it has proved to be.

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Mast Sanity asked in 2007<sup>[12]</sup>:

### **1) What is this 'research' going to be about?**

Are the HPA only taking measurements of Wi-fi signal levels (as they state in their press release)? Or are they going to look to see if there are any health effects on children [already being exposed to Wi-fi] in schools [across the UK] by taking blood samples, measuring heart rates and brain response (EEG's) and doing health surveys?

We already know what the [microwave radiation] levels emitted from the Wi-fi laptops and routers are. OFCOM (one of the HPA's 'partner' Agencies) has already taken measurements in schools [in Birmingham].<sup>[11]</sup>

Powerwatch have already done this [on the Panorama investigation into Wi-fi in schools in 2007]<sup>[8]</sup> as have various campaign groups. It is no mystery.

What the HPA did<sup>[2]</sup>:

*Scientists at the Health Protection Agency began a research project on wireless local area networks (WLAN) [Wi-Fi] in late 2007. One aspect of public concern over Wi-Fi is its use by children in schools. So as part of its study into the technology scientists set up 15 laptop computers commonly used in UK schools and investigated the strength of the radiowaves [microwave radiation] around them. ... Computer modelling is also being carried out to learn more about how the radio waves are absorbed in the body. [The HPA results concur with those taken by Powerwatch and measured by the other agencies above and yet it took them 2 years and cost the taxpayer £300,000!]*

**NO real tests carried out on already exposed children for health effects**

**NO blood samples**

**NO heart rate measuring**

**NO EEG measurements taken**

**IGNORED the constant emissions from the Wi-fi routers also present**

**IGNORED a request in 2007 to do a proper study from 8 members of the HPA EMF Discussion Group**<sup>[14]</sup>

Mast Sanity noted and asked in 2007:

### **2) The HPA are still going to compare the levels with the outdated ICNIRP guidelines.**

We know that the ICNIRP guidelines only protect against short term heating effects and are not appropriate to protect against cancer and genetic [i.e. biological, non-heating] damage over the long-term. This was highlighted in the recent Bioinitiative Report<sup>[3]</sup>.

Sir William Stewart also said the World Health Organisation (WHO) are wrong in their evaluation of the science behind the guidelines<sup>[5]</sup> and the Stewart report<sup>[4]</sup> said that relying solely on the guidelines will not protect people from biological (non-heating) effects that may become apparent.

Mast Sanity spokesperson Yasmin Skelt says "**Independent Scientific studies have consistently shown health effects from microwave emissions well below currently allowed levels<sup>[3,6,7]</sup> - so what is the point of comparing emissions against these outdated ICNIRP guidelines?**"

**What the HPA did:**

*The tests were carried out in a specially adapted laboratory at the HPA's Centre for Radiation, Chemicals and Environmental Hazards in Oxfordshire. The effective powers in the direction of maximum emission were in the range 17 to 57 milliwatts (mW) and well within the 100 mW limit set for Europe [ICNIRP]. Dr Simon Mann ... said: "Our findings are consistent with the HPA position that exposures to the radio waves from Wi-Fi equipment are expected to be well within internationally-accepted exposure guidelines [ICNIRP] and less than levels from mobile phones."*

**So – This has been a pointless exercise in spin by the HPA at the Tax Payers' expense. All it shows is that the levels of Wi-fi microwave radiation will not cook children in their class rooms. We already knew that. We said so 2 years ago.**

**It does not prove that Wi-Fi is safe.**

The following points (and many more) have still not been addressed:-

- The Department of Education guidelines state that a school should not be in the main beam of a Mobile Phone Mast.<sup>[4]</sup> The microwave radiation intensity in a classroom with Wi-fi is the same order of magnitude as if the schools were in the main beam of a mobile phone mast.<sup>[2]</sup>
- Philip Parkin, General Secretary of VOICE, said <sup>[15]</sup>: "*I have concerns about the health of both pupils and staff...I am concerned that so many wireless networks are being installed in schools and colleges without any understanding of the possible long-term consequences.*"
- The German government is already advising its citizens to use wired internet connections instead of Wi-Fi, and landlines instead of mobile phones<sup>[9]</sup>. Why isn't the HPA doing the same?
- The Public Health Dept of the Salzburg Government has issued advice not to use WLAN in schools and nurseries <sup>[16]</sup>
- The Frankfurt Local Education Authority have banned wireless networks in schools as they 'did not wish to conduct a "large scale human experiment"
- The Bavarian Parliament recommend to all schools in the land to refrain from installing wireless LAN networks. <sup>[17]</sup>
- The Executive Director of the EU's European Environment Agency said that, "*it would be prudent for health authorities to recommend actions to reduce exposures, especially to vulnerable groups, such as children.*" The Agency called for immediate action to reduce exposure to radiation from Wi-Fi, mobile phones and their masts. It suggests that delay could lead to a health crisis similar to those caused by asbestos and smoking<sup>[10]</sup>. Our government is increasing our exposure to microwave radiation, not decreasing it.

Mast Sanity trustee Yasmin Skelt said back in 2007 "**Why is the HPA happy to increase Wi-fi use in schools when it says it knows little about its health effects - in effect our children are guinea pigs for its own research.**" This is still the case.

**Mast Sanity call for the UK Government to remove Wi-Fi from all UK schools<sup>[13]</sup> –**

**Our children should not be made to be guinea pigs.**

**END.**

*Please contact us if you have any questions on any of the above.*

**The Mast Sanity Press Office can now be contacted on 0844 443 5750.**

## Notes and References:

[1] 12<sup>th</sup> October 2007 HPA Press Release - HPA announces further research into use of WiFi - [http://www.hpa.org.uk/hpa/news/articles/press\\_releases/2007/071012\\_wifi.htm](http://www.hpa.org.uk/hpa/news/articles/press_releases/2007/071012_wifi.htm)

*"Health Protection Agency announces further research into use of WiFi*

*The Agency is to carry out a systematic programme of research into wireless local area networks (WLANs) and their use. This will include measurements of exposures from the Wireless Fidelity (WiFi) network and is part of the Agency's ongoing programme of work in the area of electromagnetic fields.*

*Professor Pat Troop, Chief Executive of the Health Protection Agency said: "There is no scientific evidence to date that WiFi and WLANs adversely affect the health of the general population. The signals are very low power, typically 0.1 watt (100 milliwatts) in both the computer and the router (access point) and the results so far show exposures are well within ICNIRP guidelines. Given this, there is no particular reason why schools and others should not continue to use WiFi or other wireless networks. However there has not been extensive research into what people's exposures actually are to this new technology and that is why we are initiating this new programme of research and analyses. We have good scientific reasons to expect the results to be re-assuring and we will publish our findings."*

*WiFi is becoming increasingly widely used in homes, schools, offices and throughout the general working and public environments. People using WiFi, or in proximity to WiFi equipment, are exposed to the radio signals emitted from it and will absorb some of the transmitted energy. From existing information, it would appear that levels of exposure are considerably less than the guideline levels of the International Commission on Non-Ionizing Radiation (ICNIRP) and recommended by the Health Protection Agency for use in the UK. Nevertheless, the Agency considers that WiFi exposure assessment is an area that requires further work.*

*Given the precautionary advice from England's Chief Medical Officer and from the Health Protection Agency to discourage the non-essential use of mobile phones by children, it is logical to consider the use of WiFi in schools and in the home. Because of the diversity of available WiFi equipment and the variety of ways in which it might be used, the precise quantification of exposures from WiFi equipment is complex and requires a carefully thought-out approach to assessment.*

*Following some preliminary work, the Agency now proposes to undertake a research project to measure exposures to radio signals from wireless computer networks. The results will be compared with established international exposure guidelines and also with exposures from other commonly used sources of radio signals, including mobile phones. Discussions are underway with partner Agencies, especially those in the Education sector, regarding the practicalities of carrying out the research.*

*The findings from the investigation will be published on the Agency's website and submitted for publication in the peer-reviewed scientific literature. The results of the study, and of other studies on radio signals and health, will be used as the basis for a wider health risk review."*

[2] HPA Press Release 15<sup>th</sup> September 2009 - Scientists probe laptops' Wi-Fi emissions  
[http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb\\_C/1252660053851?p=1231252394302](http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1252660053851?p=1231252394302)

### **MEASUREMENTS on radio signals generated by laptop computers using Wi-Fi, have found they are low power and exposures are well within safety guidelines.**

*Scientists at the Health Protection Agency began a research project on wireless local area networks (WLAN) in late 2007.*

*One aspect of public concern over Wi-Fi is its use by children in schools. So as part of its study into the technology scientists set up 15 laptop computers commonly used in UK schools and investigated the strength of the radiowaves around them.*

*The team measured very small output powers even when the devices were transmitting continuously and found the powers would be lower still with the intermittent transmissions that occur in normal use. The effective powers in the direction of maximum emission were in the range 17 to 57 milliwatts (mW) and well within the 100 mW limit set for Europe.*

*The tests were carried out in a specially adapted laboratory at the HPA's Centre for Radiation, Chemicals and Environmental Hazards in Oxfordshire.*

*Dr Simon Mann, head of the Physical Dosimetry department at CRCE, today presented the team's findings at the HPA's annual conference at the University of Warwick.*

*He said: "Our findings are consistent with the HPA position that exposures to the radio waves from Wi-Fi equipment are expected to be well within internationally-accepted exposure guidelines and less than levels from mobile phones."*

*The research is continuing and the scientists are planning to make measurements of how the output power is affected by the software and the work being done on the computers. Computer modelling is also being carried out to learn more about how the radio waves are absorbed in the body.*

### **Notes to editors**

- There is no **consistent** evidence to date that exposure to RF signals from Wi-Fi and WLANs adversely affect

*the health of the general population. The frequencies used are broadly the same as those from other RF applications such as FM radio, TV and mobile phones.*

- *On the basis of current scientific information, exposures from Wi-Fi equipment satisfy international guidelines. There is no **consistent** evidence of health effects from RF exposures below guideline levels and no reason why schools and others should not use Wi-Fi equipment.*
- *For more information please contact Matthew Pardo on 01235 822745, or Andrew Tristem on 01235 822876 in the CRCE press office. Dr Mann is available for interview.*

[3] The Bioinitiative Report - <http://www.bioinitiative.org>

[4] The Government's expert group on mobile phones recommendation, from the leaflet Department of Health Leaflet: Mobile phones and health

- Independent Expert Group on Mobile Phones Report "The Stewart Report" <http://www.iegmp.org.uk/>
- Department of Health Leaflet: Mobile phones and health

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4123979](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4123979)

[5] Panorama Transcript - <http://news.bbc.co.uk/1/hi/programmes/panorama/6683969.stm>

[6] Ecolog Report - Mobile Telecommunications and Health - Review of the Current Scientific Research in view of Precautionary Health Protection, Ecolog-Institute April 2000 - sponsored by T-Mobil (Translated from German into English by Andrea Klein 2007) - <http://www.hese-project.org/hese-uk/en/niemr/ecologsum.php>

[7] Joining the Dots - Overview of Public Health Trends in Australia - [http://www.mastsanity.org/index.php?option=com\\_content&task=view&id=169&Itemid=1](http://www.mastsanity.org/index.php?option=com_content&task=view&id=169&Itemid=1)

[8] Powerwatch on Wi-fi <http://www.powerwatch.org.uk/wifi.asp>

[9] The German government is already advising its citizens to use wired internet connections instead of Wi-Fi, and landlines instead of mobile phones - <http://www.hese-project.org/hese-uk/en/niemr/bundesregierung.php>

[10] Europe's top environmental watchdog is calling for immediate action to reduce exposure to radiation from Wi-Fi, mobile phones and their masts. It suggests that delay could lead to a health crisis similar to those caused by asbestos, smoking and lead in petrol.

Professor Jacqueline McGlade, the EEA's executive director, said yesterday: "*Recent research and reviews on the long-term effects of radiations from mobile telecommunications suggest that it would be prudent for health authorities to recommend actions to reduce exposures, especially to vulnerable groups, such as children.*" -

<http://www.eea.europa.eu/highlights/radiation-risk-from-everyday-devices-assessed> and  
[http://www.nzherald.co.nz/section/2/story.cfm?c\\_id=2&objectid=10463870](http://www.nzherald.co.nz/section/2/story.cfm?c_id=2&objectid=10463870)

[11] OFCOM's AY4434 - 2.4GHz Monitoring Exercise-

<http://www.ofcom.org.uk/static/archive/ra/topics/research/topics/other/2-4ghzbandmonitoring.pdf>

And Niels Kuster et al presented a paper at a WHO conference on the exposures in 2005 - [http://www.who.int/peh-emf/meetings/archive/bsw\\_kuster.pdf](http://www.who.int/peh-emf/meetings/archive/bsw_kuster.pdf)

[12] Mast Sanity Press Release 12th October 2007 - HPA Wi-fi 'Research' Smokescreen\_

[http://www.mastsanity.org/index.php?option=com\\_content&task=view&id=176&Itemid=70](http://www.mastsanity.org/index.php?option=com_content&task=view&id=176&Itemid=70)

[13] Progressive Librarians Guild (USA) (June 2008) precaution to ban wifi - <http://libr.org/plg/wifiresolution.php>

[14] Request in 2007 to do a proper study from 8 members of the HPA EMF Discussion Group -

[http://www.powerwatch.org.uk/pdfs/20080425\\_wifi\\_memorandum.pdf](http://www.powerwatch.org.uk/pdfs/20080425_wifi_memorandum.pdf)

[15] Philip Parkin, General Secretary of VOICE

[http://www.voicetheunion.org.uk/index.cfm/page/\\_sections.contentdetail.cfm/navid/11/parentid/0/\\_sa/17/id/278](http://www.voicetheunion.org.uk/index.cfm/page/_sections.contentdetail.cfm/navid/11/parentid/0/_sa/17/id/278)

[16] [http://www.buergerwelle.de/pdf/wlan\\_dect\\_in\\_schools\\_and\\_kindergardens.pdf](http://www.buergerwelle.de/pdf/wlan_dect_in_schools_and_kindergardens.pdf)

[17] <http://omega.twoday.net/stories/3974159/>

**The Mast Sanity Press Office can now be contacted on 0844 443 5750.**

**[www.mastsanity.org](http://www.mastsanity.org)**

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**Calling for Environmentally and Biologically safe communications networks and radio frequency devices**