PART 1

Official advice on Wireless Networks (Wlan) and Children The Logic of the Stewart Report

Here I want to show you that if you follow the logic of the Stewart Report, you will come to the conclusion that there shouldn't be any Wi-Fi in schools

- 1. Wi-Fi uses the same technology as mobile phone antennae. The radiation frequency used by the 3G network is 2.1GHz and of Wi-Fi 2.45 GHz.
- 2. This technology has never been pre-market tested and never been shown to be safe.
- The UK Government's Spectrum Advisory Group recommended that wireless networks be used with the same precautions as recommended in the Stewart Report
- 4. The Stewart Report S1.42 states ... the beam of greatest RF intensity......should not be permitted to fall on any part of the school grounds or buildings without agreement from the school and parents
- 5 The wireless routers are on and emitting radiation all day long inside the school.
- 6. It has been publicly shown on Panorama that the radiation intensity inside the classrooms of a school with Wi-Fi is the same or higher than as a result of being in the main beam from a mobile phone antenna.
- 7. Sir William Stewart said he did not want to see phone masts near schools. Logically, therefore, neither should Wi-Fi routers be inside schools
- 8. Application of the Precautionary Principle means that children should not be exposed to microwave radiation in their schools.

Official UK Sources of advice 1. The Stewart Report, 2000

In 2000, the UK Government set up a committee to look into the effects of microwave radiation. This resulted in the Stewart Report which recommended a precautionary approach due to the scientific uncertainties. The chairman was Professor Sir William Stewart, who is now chairman of the Health Protection Agency and was formerly Chief Scientific Adviser to the Government.

The Stewart Report is one of the most authoritative documents on this subject in the World and the most authoritative in the UK

Excerpts from the Stewart report 2000 http://www.iegmp.org.uk/report/text.htm

- 1.18 There is now scientific evidence, however, which suggests that there may be biological effects occurring at exposures below these guidelines.
- 1.19 We conclude therefore that it is not possible at present to say that exposure to RF radiation, even at levels below guidelines, is totally without potential adverse health effects, and that the gaps in knowledge are sufficient to justify a precautionary approach.
- 1.42 ... the beam of greatest RF intensity.....should not be permitted to fall on any part of the school grounds or buildings without agreement from the school and parents
- 1.53 ...children may be more vulnerable because of their developing nervous systems, the greater absorption of energy in the tissues of the head... and a longer lifetime of exposure...
- 6.41 ...On its own adoption of ICNIRP exposure guidelines will not allow fully for the current gaps in scientific knowledge and particularly the possibility of, as yet, unrecognised thermal or non-thermal adverse effects at lower levels of exposure....
- 6.63 There is evidence that at the frequencies used in mobile phone technology, children will absorb more energy per kilogram of

body weight from an external electromagnetic field than adults.a five year old around 60%. They will have a longer time to accumulate exposure over the course of their lives, and a longer time for any delayed effects of exposure to develop.

.6.67 ...responsibility for monitoring the requirements of 6.65 and 6.66 be given to local authorities...

Research Evidence left out of the Stewart Report

Many independent scientists think that the Stewart Report did not go far enough. It is also criticised for leaving out crucial pieces of evidence such as a piece of research from Latvia.

Motor and psychological functions of school children living in the area of the Skrunda Radio Location Station in Latvia A. A. Kolodynski and V. V. Kolodynska Institute of Biology, Latvian Academy of Sciences, 3 Miera Str., Salaspils, LV-2121, Latvia

This paper presents the results of experiments on school children living in the area of the Skrunda Radio Location Station (RLS) in Latvia. Motor function, memory and attention significantly differed between the exposed and control groups. Children living in front of the RLS had less developed memory and attention, their reaction time was slower and their neuromuscular apparatus endurance was decreased.

http://www.sciencedirect.com/science? ob=ArticleURL& udi=B6V78-3VWF8W2-

<u>D& user=10& coverDate=02%2F02%2F1996& rdoc=1& fmt=summary& orig=browse& sort=d&view=c& acct=C000050221& version=1& urlVersion=0& userid=10&md5=6b5c7db617f2ac5f55722daf3714519f</u>

The signals from this transmitter were pulsed and of a similar intensity to that which children exposed to Wi-Fi would be subjected to. The NRPB which supplied the evidence to the Stewart Committee claimed this paper was unavailable and unpublished. It was later found to be published and available on the internet!

2. DfES

The DfES repeats this guidance on phones and phone masts that was made in the Stewart Report.

http://www.teachernet.gov.uk/management/atoz/m/mobilephonesand basestations/

3. UK Government's Spectrum Advisory Group

The UK Government's Spectrum Advisory Group recommended that wireless networks be used with the same precautions as recommended in the Stewart Report

http://www.ofcom.org.uk/static/archive/ra/smag/members.htm

4. In 2004 Sir William Stewart updated his report

http://www.hpa.org.uk/radiation/publications/documents of nrpb/abstracts/absd15-5.htm

Quote from the updated report:

16. "Sixth, IEGMP considered that children might be more vulnerable to any effects arising from the use of mobile phones because of their developing nervous system, the greater absorption of energy in the tissues of the head and a longer lifetime of exposure. Data on the impact on children have not yet been forthcoming. The potential for undertaking studies to examine any possible effects on children, however, are limited for ethical reasons."

In interviews after this update Sir William said he is now more worried than he had been in 2000.

http://www.timesonline.co.uk/article/0,,8122-1436543,00.html
He mentioned in particular, 4 new studies that worried him as follows:

a. One ten-year study in Sweden Mobile Phone Use and the Risk of Acoustic Neuroma. Lonn S, Ahlbom A, Hall P, Feychting M

Epidemiology. 15(6):653-659, November 2004 Data showed an increased risk of acoustic neuroma associated with mobile phone use of at least ten years duration. http://electricwords.emfacts.com/lo169623.html

b. A Dutch study (TNO) had suggested changes in cognitive function.

http://www.gr.nl/pdf.php?ID=1042

The radiation frequency used (2.1 GHz) was similar to that used by Wi-Fi (2.45 GHz) and the intensity was 1 v/m, similar to that experienced by children in their classrooms. With Wi-Fi

c. The Naila Study, Germany: 10-year Study of Residents near Mobile Telephone Mast. The radiation levels are similar to those from a Wifi network.

1000 case notes were studied of patients living within 400m of the mast for 10 years. The doctors found a trebling of cancer risk after 5 years exposure.

(http://www.tetrawatch.net/papers/naila.pdf)

d. REFLEX REPORT 2004. Confirmed double strand DNA breaks in human cells amongst other findings. http://www.powerwatch.org.uk/news/20041222 reflex.asp

Twelve institutes in seven countries have found genotoxic effects and modified expressions on numerous genes and proteins after Radio frequency and extremely low frequency EMF exposure at low levels, below current international safety guidance, to living cells in-vitro. These results confirm the likelihood of long-term genetic damage in the blood and brains of users of mobile phones and other sources of electromagnetic fields. The idea behind the REFLEX study was to attempt replicate damage already reported to see if the effects were real and whether, or not, more money should be spent of research into the possible adverse health effects of EMF exposure. They concluded that in-vitro damage is real and that it is important to carry out much more research, especially monitoring the long-term health of people.

http://www.itis.ethz.ch/downloads/REFLEX Final%20Report 171104.pdf

http://www.verum-foundation.de/cgi-bin/content.cgi?id=euprojekte01

5. UK Department of Health

The UK Department of Health advice to parents about mobile phones includes the following -

There are significant gaps in our scientific knowledge.

The expert group has therefore recommended that in line with a precautionary approach, the widespread use of mobile phones by children (under the age of 16) should be discouraged for non-essential calls.

The UK Chief Medical Officers recommend that if parents want to avoid their children being subject to any possible risk that might be identified in the future, the way to do so is to exercise their choice not to let their children use mobile phones

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH 4009248

6. Professor Challis, Chairman MTHR

Professor Challis (vice-chairman of the Stewart Report and chairman of the Government's MTHR) recently stated that children should not put wifi enabled laptops on their laps. He also said that at 2cm distance from the laptop antennae the fields were equal in strength to a mobile phone, and he continues to say that primary school children should not be using a mobile phone at all.

http://www.telegraph.co.uk/news/main.jhtml;jsessionid=PXNHYNH3R SJFDQFIQMFCFGGAVCBQYIV0?xml=/news/2007/04/28/nesmog28. xml

There are many more studies looking at the effects of microwave radiation, too many to mention here.