



Safe Schools Information Technology Alliance

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Open letter from SSITA regarding their serious concerns about the provision of wireless ICT in schools.

To Rt. Hon. David Cameron, Rt. Hon. Nick Clegg, Rt. Hon. Michael Gove, Sarah Teather MP, Nick Gibb, MP, Tim Loughton, MP and Lord Hill of Oareford.

Dear Mr. Cameron, Mr. Clegg, and Ministerial Team - Department for Education

SSITA is an alliance of several organisations who are concerned about the proliferation of wireless technologies in schools and, consequently, the risks from microwave radiation within the classroom and school itself.

I hasten to say that we are totally in favour of the development of ICT as such and recognise its great benefits in education. What concerns us is that within the kudos of [Becta awards](#) and the desire to acquire [Becta ICT Marks](#), decisions have been taken by people who appear to understand little of the most important concept of all- namely that the radiation emitted in wireless technologies is not in fact the “radio waves” that we have been exposed to for decades from Radio and TV transmitters. The fact is that wireless technologies use carrier waves in the higher frequency or microwave part of the electromagnetic spectrum, modulated by information sent in lower frequencies as packets or pulses. Scientists think that the low frequency pulses are of particular concern when it comes to adverse health problems because some of them are at similar frequencies to processes in the body, such as the propagation of nerve impulses.

We believe that if parents were truly aware of the facts, they would not be happy to send their children into schools with Wi-Fi installed. We find that when people **do** understand that Wi-Fi and other devices in the home emit microwaves continuously, they then ask how they can hard-wire their home computers, and decide to change back from DECT cordless telephones to landline phones. The next question they ask us is:

“If these devices are so dangerous why hasn’t the government told us so before now? Why have we been left to find this out for ourselves?”

The Labour administration did nothing to pass on the concerns and advice of the Bio-Initiative Report of 2007 (or the many other studies published in the scientific literature) to UK citizens. However, the German government warned the German population to reduce their exposure to wireless devices, the French government has just banned the use of mobile phones by children in French schools and the French legal system appears to be willing to implement the precautionary principle in court judgements. In contrast, the average British parent, teacher and consumer is appallingly ill-informed with regard to the emerging health risks from wireless technologies. Despite reassuring statements made by the communications industry, **there are a growing number of studies which have found biological damage resulting from microwave exposures that someone using a Wi-Fi enabled device is subjected to.**

1. The precautionary principle and HPA advice

“According to the precautionary principle, if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is not harmful falls on those taking the action.”

“This principle allows policy makers to make discretionary decisions in situations where there is the possibility of harm from taking a particular course or making a certain decision when extensive scientific knowledge on the matter is lacking. The principle implies that there is a social responsibility to protect the public from exposure to harm, when scientific investigation has found a plausible risk. These protections can be relaxed only if further scientific findings emerge that provide sound evidence that no harm will result.” [Wikipedia]

Adoption of the precautionary principle in relation to electro-magnetic radiation was recommended by the Stewart Report and has been stated to be the basis of the government’s approach.

The HPA states that there is “no consistent evidence to date that Wi-Fi and WLANS adversely affect the health of the general population.” But school children are NOT the “general population”. Professor Sir William Stewart highlighted in the Stewart Report that children are more vulnerable because, amongst other reasons, their skulls (and we would say bones) are thinner than those of adults. A recent study has found that they may absorb ten times more radiation than an adult in their bone marrow. Yet it is this HPA statement on “no consistent evidence” that LEAs, head teachers and boards of governors are using to justify the use of Wi-Fi in schools.

The phrase “**no consistent evidence**” does not mean that there is **no** evidence and there have been many studies which have found biological damage from low power microwave exposures. These prompted the authors of Bio-Initiative Report (<http://www.bioinitiative.org/report/index.htm>) to state that:

“The consequence of prolonged exposures to children, whose nervous systems continue to develop until late adolescence, is unknown at this time. This could ... result in diminished capacity for thinking, judgment, memory, learning, and control over behaviour. “

2. Becta advice (notwithstanding the fact that Becta is to be disbanded)

Becta has clearly stated that: **“A wired network must..... be used as the main network in an institution” (page 14, Version D, 2007-(Local area networks in institutions.”** Nowhere does it say in the guidelines that wireless networks should **replace** wired networks. Indeed, it says the opposite- wireless networks **should not replace** wired networks in schools. This guidance seems definitive. Yet we know of a primary school which had, quite properly, a fully wired network. However, as part of its effort to achieve the **Becta ICT Mark**, this school installed Wi-Fi. When **evidence** was presented to the governors of the damaging effects that Wi-Fi could have on children, the governors, despite having serious doubts, clearly felt forced to act on The Health Protection Agency’s advice that there was no reason that schools should not use Wi-Fi. For governors of schools to be placed in such an untenable position is intolerable. Generally, governors have **not been made aware** that Wi-Fi involves microwave radiation, or been trained in what to look out for when monitoring possible health effects experienced by pupils or teachers, and are perhaps making unfortunate decisions out of ignorance themselves.

NB. We would also consider wireless technologies in schools to include wireless monitors around the school for reducing the school's carbon footprint (these could be wired), or security systems. Both of these are now being introduced into schools- which adds to the overall amount of "electromagnetic smog" overload.

3. National Governors Association

Becta has supported the National Governors Association paper "School improvement through ICT-guidance for governors." In this report, under Section V, it states:

"Governors have responsibility **for health and safety in schools**. This covers physical safety such as the **positioning of the equipment** and personal safety when using the Internet or email".

In the National Governors Association document (quoted) it reads (Under ICT safety)

"Governing bodies and schools need to be aware of the potential issues and risks of ICT as well as its benefits. It is important that the senior leadership team develops a clear strategy on ICT which defines roles and responsibilities for management, implementation and safety....etc"

A recent telephone survey that we undertook amongst a handful of head teachers revealed that neither they nor their governing body had received any training on the appropriate location of wireless routers or in the recognition of microwave sickness symptoms, in relation to the positioning of this equipment. They were ill-equipped to ascertain whether a child presenting with nausea, headaches or others symptoms might in fact be presenting with the symptoms of microwave sickness. Not one head teacher to whom we spoke had been made aware that **Epistaxis** (nose bleeds) is one of the **first indicators** of adverse microwave exposure in children. We asked them if they were aware of the HPA's avowed intention to monitor the health of children in schools with Wi-Fi. They were not aware of such monitoring, nor had they been asked to take part in any such monitoring.

4. Parental choice

Some head teachers and governors are responding to parental concerns by saying that they will have to find another school for their children. There are very few schools left now where parents have a choice-(unless they now try to set up their own). There are often no viable alternatives in a given area for "aware" parents within the state system. Whatever happened to parental consultation, and giving parents the opportunity to make informed decisions on their own children's well-being?

We have also heard about parents who, having voiced their concerns about Wi-Fi, were then ostracised by other parents on the playground, and of another concerning a child being singled out in front of the class and given a lecture on the safety of Wi-Fi. In yet another case brought to us, parents who requested that their child should **not** use a Wi-Fi enabled laptop, were told that this would not be practicable. These same parents would not have their child exposed to wireless radiation in his own home, yet they are forced to have their child exposed to it in school. Their permission for this to happen was never asked –nor, obviously, would it have been given.

In effect, serious discrimination is happening here, concerning the right of **every** child to a **safe learning environment**, because we know of another case where a parent's request not to have his daughter use a wireless laptop was in fact honoured- in another school, by another head.

We have also been recently informed that one school has decided to remove Wi-Fi **because of potential legal action from former pupils (today's pupils) in several decades time.**

Many people believe that the emerging health threat will surpass that from tobacco and asbestos in severity.

We would ask you as a matter of urgency to encourage schools and their PTAs to fundraise to install or reinstall wired systems. **No school should be afraid to do an “about-turn” on this.** Whilst we are aware that in many cases the decision to install the Wi-Fi was made initially with the very best of intentions, once schools and local authorities have been made aware of the potential health effects and risks, then the greater the delay in removal of Wi-Fi , the greater the likelihood of retrospective liability. Swift action in accordance with the precautionary principle would therefore seem prudent.

We should be grateful if you would consider the matters raised and kindly let us know how you intend dealing with them in formulating government policy.

Yours sincerely,

Diana Hanson (Mrs.) Chair/the CAVI Society/ Cavisoc.org.uk and member of **Cavisoc-SSITA.**

Copies to:

The Children's Commissioner, Parents' groups, MPs, and various organisations-as on-going **Cavisoc-SSITA** awareness work.