

### **Written evidence submitted by Dr Elizabeth Evans (SMR08)**

Re: Proposed UK Smart Meter Roll-Out

I am a qualified doctor and the mother of four young children and there is no way that I will ever agree to have a wireless Smart Meter fitted in my house, and I have been encouraging my friends and neighbours to take the same stance.

1. My primary concern about Smart Meters is the health risks from the wireless radiation emitted by the meter to communicate with the utility provider, and also the wireless radiation used between the home hub to the meter (the HAN). There are rapidly increasing concerns worldwide about the negative impact human health of long term exposure to the microwave (radiofrequency) radiation emitted by WiFi hubs and other wireless devices such as mobile phones and cordless phone and Smart Meters.
2. In May 2011 the International Agency for Research on Cancer, a branch of the WHO, classified radio frequency electromagnetic fields as possibly carcinogenic to humans (Group 2B) [www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208\\_E.pdf](http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf). This puts RF EMFs in the same group of agents as DDT, lead, and pesticides. Although the press release mentions mobile phones, RF EMF is the same radiation as is emitted by Smart Meters and wireless HANs.
3. I am aware that the DECC, who were working in partnership with "Consumer Focus", held a Workshop on "Potential Health Concerns linked to Smart Metering" on 23rd February 2012. Several individuals who attended, including scientists in this field and pressure groups, gave presentations raising some very serious concerns about health threats posed by the radiation emitted by Smart Meters. In the DECC's follow-up posting to the consultation process, there was no mention of the February meeting, or the health concerns raised. There is no mention in any of the literature from the DECC of the proven safe distance from one or more wireless 'Smart' Meters for humans and animals, or the duration of safe long-term exposure in hours per day. There is also no mention of proven safe exposure levels for pregnant women and children or the impact of multiple Smart Meters on RF safety levels in apartments/terraced housing etc.
4. You are doubtless using the HPA's position on RF EMR exposure which follows standards developed by ICNIRP as your benchmark for safety. I have serious concerns about these safety limits, as do the EU Parliament who voted them out of date and obsolete on 4th September 2008, 522 votes to 16. This was after certain members of the EU Parliament had read the contents of the 2007 BioInitiative Report, a policy which ICNIRP itself supports. At a presentation to the Radiation Research Trust Conference in September 2008, Paolo Vecchia, the Chairman of ICNIRP, made the following statement: "The ICNIPR guidelines are neither a mandatory prescription for safety, the "last word" on the issue nor are they defensive walls for Industry or others." This comment makes it clear that any decision to adopt these guidelines into national legislation as "sufficient to protect public health" is political.

5. The more recently published 2012 BioInitiative report <http://www.bioinitiative.org/> draws on new studies released since 2007. This report concludes that we have far more evidence than is necessary to require us to immediately take more precautionary action to protect ourselves, our children and all life of the planet from RF radiation.  
In twenty-one chapters of this 2012 update, 29 independent scientists and health experts from 10 countries assess about 1800 new research papers (from 2006 to 2011) regarding possible risks from wireless technologies and electromagnetic fields. They hold 10 medical degrees (MDs), 21 PhDs, and three MSc, MA or MPHs. Among the authors are three former presidents of the Bioelectromagnetics Society, and five full members of BEMS. One distinguished author is the Chair of the Russian National Committee on Non-Ionizing Radiation. Another is a Senior Advisor to the European Environmental Agency.  
The last five years' worth of new scientific studies tell us the situation is much worse than thought in 2007, and yet people around the world have so much more daily exposure than even five years ago. Exposures are linked to a variety of adverse health outcomes that may have significant public health consequences. Overall, there is reinforced scientific evidence of risk where there is chronic exposure to low-intensity electromagnetic fields and to wireless technologies that surround us 24-7 (radiofrequency radiation including microwave radiation). No argument for no-action can be persuasive now. If wireless smart meters are put into every home in the country we could face a public health disaster worse than that caused by smoking, asbestos or leaded petrol. We may see even higher rates of cancer, dementia (especially early onset), infertility, behavioural and developmental problems in children (including autism), sudden death from cardiac arrhythmias as well as depression, anxiety, headaches and sleep disorders – all of which have been linked to chronic exposure to RF radiation. The cost to the country of epidemic levels of these illnesses will far outweigh any savings that Smart Meters may bring to individual energy bills.
6. Another document to be aware of is the Freiburger Appeal 2012 <http://freiburger-appell-2012.info/en/observations-findings.php>, 1000's of doctors and scientists who call for the immediate reduction in exposure to RF radiation to all human life including "Promote the development of communication technologies and electricity use that is more compatible with health. Prefer wired solutions for home use and public facilities. Expand fibre-optic networks as the foundation of a modern, sustainable, and performance-based technology that meets the ever-increasing demand for higher data transmission rates."
7. You ask "What lessons can be learned from successful smart meter implementation and usage elsewhere in the world?" If you look at the US and Canada and Australia you will see that thousands of people have complained that a newly installed Smart Meter has caused illness, sometimes so severe that the person can no longer sleep in their own home and have to sell their house as the utility company will not replace the Smart Meter with the old analogue meter. Many heart-breaking and disturbing stories like this can be found on the Australian Stop Smart Meter website which is a voice for those whose lives and health have been destroyed by the Smart Meter roll-out in Australia <http://stopsmartmeters.com.au/category/share-your-story/>. Indeed some councils, neighbourhoods and states in the US and Canada have decided to have wired-only Smart Meters after witnessing the misery caused in other parts of the country by wireless Smart

Meters e.g. Idaho. Italy have had entirely wired Smart Meters for many years and very little resistance to their implementation.

May I urge you to listen to the experiences of citizens of other countries that have already started rolling out wireless Smart Meters, and also to the concerns that UK citizens are beginning to voice about the roll-out here. The benefits stated of Smart Meters are not convincing, indeed the cost of the roll-out will put bills up significantly and, unless people change their own behaviour, there is no chance of reduced bills. Other concerns are privacy and security issues which may be as serious as the health effects. There is no evidence that any of these issues have been listened to or addressed with any seriousness and the result could be catastrophic for the health, and the economy, of the UK.

*February 2013*