DECC confirms talks with Dept of Health over smart meter risks

by Natalie Evans  25 Jan 2011

Officials from the UK's Department of Energy and Climate Change have confirmed “discussions” with their counterparts at the Health Department over safety concerns regarding the mass installation of smart meters.

Energy chiefs say talks will continue with the Department of Health as worries grow over research linking smart meter technology and an increased risk of cancer.

The news follows a warning that indoor electromagnetic fields and radio waves emitted by smart meters pose a growing health risk.

The risk of cancer has been linked to intense or prolonged exposure to electromagnetic fields (EMFs) and radio frequencies (RFs).

Worries persist about the potential for mobile phones to cause brain tumours.

And now researchers are warning of the risks from the cumulative effect of waves emitted by electric, gas and water smart meters, together with other devices in the home.

The Government is working with Ofgem to carry forward plans for every home in Britain should be fitted with remote-linked smart meters by 2020.

But experts say that combined with wi-fi hubs, mobile phones and other wireless devices this array of meters will turn homes into something like the inside of a microwave oven.

Smart meters record the exact levels of gas and electricity households use and remotely report the data to suppliers, doing away with meter readings and estimated bills.

The new generation of radio-linked smart meters were first introduced in the UK in September 2008, for customers in the East and West Midlands.

In December 2009, the Department of Energy and Climate Change (DECC) announced its intention to roll-out smart meters to all UK homes by the end of 2020.

But with more than 20,000 UK homes now using smart meter technology, wireless networks are coming under increased scrutiny.

The World Health Organisation states that EMFs are not harmful if they remain within strict frequency boundaries set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

However, an investigation conducted by researchers in the USA, where smart meters have been used since 2006, warns emissions can exceed safety limits.

But a report from, California-based Sage Environmental Consulting, reveals that the constant presence of a smart meter could lead to prolonged exposure to potentially harmful RFs.
The Sage report says: "Significant unanswered questions still exist about what levels of radio-frequency microwave radiation will be produced by these [smart] meters.

"Smart meters can produce excessively elevated RF exposures, depending on where they are installed.

"With respect to absolute RF exposure levels predicted for occupied space within dwellings, or outside areas like patios, gardens and walk-ways, RF levels are predicted to be substantially elevated within a few feet to within a few tens of feet from the meter(s).

"The rollout of millions of new RF sources (smart meters) will mean far greater general population exposures, and potential health consequences."

The paper explains that people are already increasingly exposed to radiofrequency radiation at home through the use of numerous wireless devices.

These include mobile and cordless telephones, Blackberry and iPhones, broadband, baby monitors and home security systems.

The report concludes that neither the authorities, nor the utility providers nor the consumer "know what portion of the allowable public safety limit is already being used up or pre-empted by RF from other sources already present in the particular location a smart meter may be installed and operated."

The DECC states that the issue was noted in an impact assessment which was published alongside the department's 'Smart Meters Prospectus' last July.

A DECC spokesman said: "We will keep under review any evidence related to the effects of radiofrequency signals on the health of individuals.

"Smart meters can pave the way for a transformation in the way energy is supplied and used. They will provide consumers with real-time information about energy use, enabling them to monitor and manage their use.

"Consumers will receive accurate bills. Switching between suppliers will be smoother and faster and improvements in the delivery of energy efficiency advice will be supported.

"Decisions on the communications requirements for smart meters have not yet been made and a communications technology solution has not yet been selected.

"Part of the work of the Smart Meter Implementation Programme, which is being taken forward by DECC and Ofgem, will be to develop detailed plans in relation to smart meter communications requirements, whether in the home or outside.

"This work will consider the range of issues relating to smart meter communications and the different technology solutions, including concerns expressed by some people about electromagnetic fields and electrical sensitivity.

"We will continue to discuss the issues raised with the Department of Health, Health Protection Agency and other relevant organisations as our work on smart metering progresses.

"We are currently examining the responses to the recent consultation on the roll out of smart meters, and we will publish the Government’s response along with the plans for the roll out later this year."