Radiation Research Trust Conference, 8-9 September 2008

'EMF and health: a global issue'

by Michael Bevington

This two-day conference involved 28 speakers, mainly international research scientists and regulators, introduced by 8 chairpersons, mainly European politicians. It was filled to capacity with 100 delegates including representatives of the mobile phone industry, the press and interested individuals. The aim was reasoned debate about a precautionary approach. It was said to be the first time that the two sides ('there is no problem' and 'we have a serious problem') have been brought together. Whether it succeeded from the viewpoint of people suffering from ES will depend on whether progress is made in introducing a precautionary approach with sub-thermal limits which reduces harmful EMR exposure.

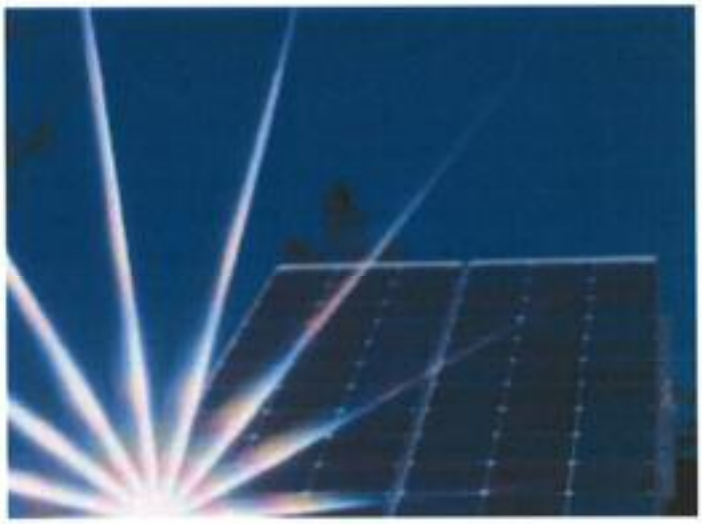
Two areas of discussion seemed important for ES people: (1) the arguments for a precautionary approach and (2) electro-sensitivity.

1. Arguments for a precautionary approach

Two aspects stood out showing how far sub-thermal effects are now established. Firstly, there seems general agreement that power-lines are associated with childhood leukaemia, and possibly Alzheimer's etc., suggesting a limit of 0.1-0.4 μT. It was unclear, however, how far all governments support appropriate building limits.

Secondly, much research on brain tumours and mobile phones now suggests an increased risk after 10 years' use, although some Interphone findings seem skewed to find no risk or even show benefits because of study design faults. More worrying, however, was new data suggesting a much higher, 5-fold, risk for those starting to use mobile phones aged under 20 years. In a powerful plea for a radical change from ICNIRP's present standards, Professor Grigoriev, the chairman of the Russian National Committee on Non-Ionising Radiation Protection (RNCNIRP), felt it was all but too late to protect the next generation: 'The train has gone'. ICNIRP is not due to have an interim review of its guidelines until 2009, with a full review in 2012.

The health and economic stakes involved in EMR appear high. Lloyd Morgan's prediction, based on the 3,600 brain tumours in the US attributed to cell-phone EMR in 2004 and a tumour rate of 10% similar to cancer from smoking, with a latency period of 30 years, forecast over 1.5 million tumours by 2019, at $400 billion per year in hospital costs at $250 K per patient. The validity of such forecasts is uncertain, but such a cost could damage western economies and outweigh tax revenues from mobile phones; and this is for just one out of many EMR-related illnesses. Time seems short too. At present rates of decline, all honey bees in the UK may disappear by 2018;



Ulrich Warnke showed how bees are susceptible to ever-increasing electro-smog.

The central issue was how far to apply a precautionary approach to deal with public health threats, when there are still gaps in the scientific research or plural perceptions of the threat. Thus the WHO and HPA so-called 'fact' sheets were criticised for not presenting both the health threats perceived by many scientists and the official denials of threat. Although UK official advice is for children to minimise use of mobile phones, this message is apparently promulgated simply by a leaflet. In the past precautionary action, not just advice, has preceded scientific evidence. Sir William Stewart, chairman of the HPA, instanced Dr Snow's observations leading to the removal of the Broad Street water-pump handle before the cholera microbe was discovered, and the supply of citrus fruit to sailors before vitamin C was discovered. He therefore deduced that 'at a time of uncertainty … non-peer reviewed articles should not be ignored'. Nevertheless the UK government's 'proportionate response to meet social and economic needs' appeared to other delegates to put some people's convenience or wealth before other people's health. It condemns people outside the so-called 'general population' to a life reduced in quality or length. There was no evaluation of the ethical basis for this approach, where government knowingly allows vulnerable people to be forcibly irradiated and harmed against their will.

Cindy Sage, a co-editor of the BioInitiative Report of 2007, argued that a primarily scientific approach, such as currently adopted by ICNIRP, demands almost 100% certainty on both health effects and mechanistic studies. In practice, however, most precautionary public health and environmental initiatives are taken on a lower level of certainty, perhaps 10-30%, provided there is clear evidence of increased risk. Action against smoking was based on general public health concerns, although the mechanism and which of the 400 chemicals causes lung cancer are still not known.