

Health and Safety Commission Paper		HSC/07/31	
Meeting Date:	15 May 2007	Open Gov. Status:	Partially closed
Type of Paper:	Above the line	Paper File Ref:	
Exemptions:	Annex 2		

HEALTH AND SAFETY COMMISSION

Directive 2004/40/EC on the exposure to workers to the risks arising from physical agents (Electromagnetic Fields)

A Paper by: Robert Parkes

Name of Board Member lead: Giles Denham

Cleared by Jonathan Rees and Giles Denham on 1 May 2007

Issue

- 1 HSE's approach to dealing with the European Physical Agents Directive on Electromagnetic Fields (EMF).

Timing

- 2 For discussion at the HSC meeting on 15 May.

Recommendation

- 3 That the Commission endorses HSE's strategy for taking this Directive forward towards implementation.

Background

- 4 The objective of this Directive is to protect workers from the risks arising from exposure to EMFs. It is due for implementation by 30 April 2008.
- 5 The Directive was negotiated in line with a strategy agreed by HSC and Ministers in January 2003. The specific impact of the Directive on magnetic resonance imaging (MRI) was highlighted by the House of Commons Science and Technology Committee's report "Watching the Directives", issued in June 2006. However, the Directive impacts on a number of different sectors and there are issues relating to its scientific basis. A fuller background note is attached at Annex 1

Argument

- 6 HSE's strategy for handling this Directive is two fold and takes account of the fact that its benefit to worker health and safety is highly questionable. First, we are working with other Member States and stakeholders, such as the Engineering Employers' Federation (EEF) and the Royal College of Radiologists (RCR), to

gather evidence that will provide the European Commission (EC) with a basis for postponing the transposition date and carrying out a full review of the Directive. So far this has led to recognition by the EC that the impact on MRI is of concern and that it is prepared to address the problem, not excluding a proposal to amend the Directive. Clarity on what actions the EC intend to take should be available in the coming months.

7 Secondly, recognising that the work in Europe may not succeed, HSE is proceeding in parallel with work to implement the Directive. We are working with stakeholders (eg. the RCR, the EEF, trade unions and others) with the aim of establishing a clearer understanding of the impact of the Directive (in its present form) so that we can develop a sensible, proportionate approach to implementation, should that prove to be necessary.

8 The implementation timetable is considered further in Annex 2.

Consultation

9 An internal EMF Directive Project Board, with Giles Denham as the Senior Responsible Officer, oversees implementation. Consultation has included: PFPD, FOD; Cross Cutting Interventions Division, including International Unit; Legal Adviser's Office; and HSE Chief Scientist. HSE has also given presentations to stakeholders including the Small Business Trade Association on the main issues of the directive.

Presentation

10 HSC/E is working with stakeholders to build a consensus on the way forward that is sensible and proportionate. Publication of HSE's MRI research results (see Annex) may result in some media attention.

Costs and Benefits

11 An updated RIA would be prepared for any implementing regulations. A Regulatory Impact Assessment (RIA) carried out by HSE following adoption of the Directive in 2003 indicated that there are no health and safety benefits above existing UK legislation and guidance

Financial/Resource Implications for HSE

12 To date, staff costs in taking forward this Directive since its adoption in 2002 have been around £500 000. HSE has spent £104 000 (ex VAT) on research into the MRI issue. There will be further costs in taking forward the consultative process including preparing any regulatory package. Based on expected staff costs, this may exceed £150 000.

Action / Next Steps

- 14** To note the paper and that HSE will return to the Commission later in the year with options on how to proceed with implementation and with a further estimate of costs.

ANNEX 1: THE EMF DIRECTIVE

The Directive

1 The Directive is one of a set of four Physical Agents Directives aimed at protecting workers' health & safety. (The noise and vibration directives have already been implemented & the Artificial Optical Radiation Directive is due for implementation in April 2010.). The Directive sets out provisions on risk assessment; avoiding or reducing risk; information & training for workers; health surveillance; and exposure limit values and action values. It aims to protect workers from the risk of 'acute health effects' that include tingling / prickling feeling sensation, thermal effects, induced current effects, vertigo, nausea, RF shocks & burns, microwave auditory effects.

2 The values in the Directive are based on guidelines by the International Commission on Non-Ionising Radiation Protection (ICNIRP). These are used to define absolute Exposure Limit Values (ELVs), set at a level well below that at which adverse effects might be expected. As these cannot be easily measured, a set of more readily measured values have been derived called Action Values (AVs). These are external EMF strengths, also set at conservative levels. If external EMF strengths in the workplace are lower than the AVs the ELV will not be exceeded and no further action is necessary. If they are greater, the ELV may be exceeded and the employer would need to carry out further investigations.

3 A number of stakeholders have questioned the scientific basis behind the ICNIRP values, suggesting they should, instead, be based on different principles and that the effects are not felt at the values ICNIRP uses.

Existing UK Legislation

4 There is at present no UK legislation specific to EMFs. Control is exercised through the general duties in the Health and Safety at Work etc Act 1974, the Management of Health and Safety at Work Regulations 1999 and by reference to ICNIRP guidelines.

How the Directive was negotiated

5 The EU negotiating strategy agreed with Ministers, on HSC's advice, was that the UK should:

- not oppose the Directive outright, since it was clear that no other Member State would support the UK on this.
- point out that there are no health and safety grounds for a new Directive on EMFs, and that therefore any compliance costs for industry should be minimal.
- call for a full cost-benefit analysis to be made in line with the Commission's Action Plan on Better Regulation. The UK raised this but received virtually no support from other Member States and it was rejected by the Commission.
- argue strongly for the Directive to continue to apply to known acute effects only.

- argue strongly that the Directive be based on both the values and concepts of the well established international ICNIRP guidelines, and oppose any moves to introduce action values below the ICNIRP reference levels.
- negotiate requirements which place minimum additional burdens on industry by opposing unnecessary requirements at the action value (e.g. inappropriate health surveillance).

Whilst these objectives were largely achieved there are nevertheless genuine concerns about the impact of the agreed Directive in a number of areas, as indicated below.

Impact on Key Sectors

Magnetic Resonance Imaging

6 The MRI community is concerned that the Directive could effectively prohibit some MRI procedures. The House of Commons Science and Technology Committee studied the negotiations and in its report, "Watching the Directives" criticised all parties, including HSE. To address the problem HSE has funded research into the scale and nature of the Directive's impact on MRI that is expected to report in May 2007. An HSE-led working group oversees this, and other work, to find a resolution to the problem, with representatives from radiologists, manufacturers, researchers and the Health Protection Agency. This work has achieved some traction in the EC towards a fresh assessment of the Directive.

Engineering

7 An EMF stakeholder group has been set up with representatives from across the affected sectors. The EEF has raised concerns about the impact on the manufacturing sector, in particular in relation to certain types of welding. HSE is working closely with them to analyse this further with a view to developing practical solutions.

Other Sectors

8 HSE- funded research (undertaken by the National Radiological Protection Board) shows that equipment used in the following processes may expose workers above the levels set out in the Directive: high power TV/radio broadcasting; electrical generation; induction & dielectric heating. Discussions with these stakeholders continue, though, for example, those involved in maintenance of mobile phone masts are thought already to comply with ICNIRP values and are not expected to have problems with compliance.

Consultation

9 Ahead of formal consultation, HSE is writing to key stakeholders to obtain more information on the likely impact of the Directive for their sectors/interests and to raise wider industry awareness. This will help develop any detailed regulatory proposals for implementation.



**←Information removed Section 35 of FOI
Act“ Formulation of Government Policy”**