

## **Federation of the European Academies of Medicine (FEAM)**

Palais des Académies Rue Ducale 1 B-1000 Bruxelles

Tel: 0032 2 550 22 59 Fax: 0032 2 550 22 68 Email: [info@feam.eu.com](mailto:info@feam.eu.com)

Website: [www.feam.eu.com](http://www.feam.eu.com)

### **Report to the European Commission**

#### **EU Directive (2004/40/EC) on minimum health and safety requirements regarding exposure of workers to the risks arising from physical agents (electromagnetic fields (EMF))**

The Physical Agents (EMF) Directive was published on 29 April 2004 with mandatory adoption into national law for each EC country within four years, i.e. 2008. It aims to protect workers from exposure to EMF with a focus on known short term effects. Following the ICNIRP Guidelines, exposure limits for electric and magnetic fields (EMF) were initially defined for all frequencies ranging from 0 Hz to 300 GHz. These limits were finally removed for lack of scientific evidence.

FEAM fears that the Directive may still have a negative impact on clinical magnetic resonance imaging (MRI) with potentially highly damaging consequences for patient care. It strongly supports the request made to the UK government by British scientists that the implementation of the Directive be delayed so as to provide sufficient time for an expert review of the evidence on the safety of EMF exposure at various levels, at various frequencies and in various situations. It would then be possible to provide evidence-based recommendations on safe limits for exposure to EMF in particular circumstances

FEAM's principal concerns include the following:

- (1) The lack of hard scientific evidence to support the exposure limits set initially to avoid possible harmful to equipment operators; and which it would have been illegal to exceed. These were "precautionary" values, far below the limits known to produce physiological effects.
- (2) The application of the same exposure limits and rules to all occupations, from telephone receptionists to medical and nursing staff supporting patients undergoing MRI examination. The risk/benefit assessment in these two situations will be quite different. Adequate research on appropriate safety rules for medical and nursing staff and for MRI technicians is needed
- (3) This Directive undermines the future development of MRI, which has proven to be a revolutionary diagnostic tool and a safe alternative to x-rays. The decrease that the implementation of the Directive would cause in the use of diagnostic MRI and, even more, of interventional MRI procedures especially in children or frail and unconscious patients would itself give rise to serious harm and would also lead to the increased use of x-rays with their well established hazards.

FEAM recognises that these implications for MRI are an "Unintended Consequence" of the Directive and urges the Commission to produce amendments that will mitigate them.

April 2006