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## **CEEMET / ORGALIME**

### **Position Paper on the Electromagnetic Fields Directive (2004/40/EC)<sup>1</sup>**

10/04/2007

*CEEMET represents the interests of employers' organisations in the metal, engineering and technology-based industries from 21 countries with a particular focus on social policy issues. ORGALIME represents the mechanical, electrical, electronic and metalworking industries of 24 European countries. Between them CEEMET and ORGALIME represent about 200 000 companies employing some 12,5 million people, 97% of them are small and medium sized enterprises (SMEs).*

#### **EXECUTIVE SUMMARY**

CEEMET and ORGALIME are seeking a complete review of the European Physical Agents Directive on Electromagnetic Fields (EMF), in line with the agenda for better regulation in Europe.

We are not aware of any evidence base to confirm that exposure to EMF, at the levels likely to be associated with non-specialist working environments, causes harm to people. Therefore additional legislation to control exposure is unnecessary.

This Directive was developed under the precautionary principle - an inappropriate application, for an extremely low risk, which can already be adequately managed under the framework directive.

The European Commission failed to carry out an adequate regulatory impact assessment for this dossier. However, research suggests that this directive could negatively affect many manufacturing processes, such as welding metal, and curtail the use of Magnetic Resonance Imaging (MRI) technology, an essential medical diagnostic tool, with no overall benefit to the health of workers.

Regulators and businesses alike are only now beginning to understand the unintended effects which may be brought about by this Directive.

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<sup>1</sup> Directive 2004/40/EC of the European Parliament and of the Council of 29 April 2004 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields) (18th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC).

There is an opportunity to address these issues, using the tools of better regulation, before European industry is damaged.

We urge the EU to:

- Delay implementation for one year until a proper impact assessment is finished;
- Establish a high level team to examine the implications of this directive to report to the EC / Council of Ministers
- To commit to action based on the findings of the review

## **BACKGROUND**

On 30<sup>th</sup> April 2004 the European Union published the Physical Agents (Electromagnetic Fields) Directive (2004/40/EC), in the Official Journal (OJL 184, 24.5.2004).

The Directive sets out limits for the occupational exposure of workers to electromagnetic fields (EMF). It requires employers to:

- conduct risk assessments of potential exposure,
- take measurements or make calculations as necessary,
- implement measures to control the exposure of workers to EMF
- conduct health surveillance where there is evidence that exposure may have exceeded the limit values

The situation is further complicated because exposure to EMF cannot be measured directly. Limit values are based upon mathematical models which relate measurable field strengths to an estimate of personal exposure.

## **IMPACT ON HEALTH**

Exposure to EMF at work is not harmful. Although, it can lead to short term effects, such as local heating effects and peripheral nerve stimulation, in people exposed to very high fields.

The *action* and *limit values* contained within the directive will prevent exposure to extremely low levels of EMF. This will not lead to any improvement in health but will add significant burden to business.

Misuse of some types of industrial equipment can result in accidental RF burns. However, this situation is already adequately covered under the Framework Directive.

## **IMPACT ON INDUSTRY**

The EMF Directive will affect a wide range of manufacturing and industrial processes. Our own investigations with member companies have revealed a significant number of welding and induction heating operations which generate EMF at a level which would be in contravention of the Directive. A recent study undertaken by TWI (the Welding Institute) on behalf of the Health and Safety Executive (HSE) in the UK, found that some basic manufacturing processes may be seriously curtailed or even prohibited. It is likely that some simple welding work will have to be done outside EU because the directive's limit values risk being exceeded and there will often be no practical steps which can be taken to reduce workers' exposure. Also measurement will be costly and typically provide inconclusive results.

We have serious concerns that common industrial processes would also be adversely effected by the Directive, with no positive benefit for worker health and safety. These could include:

- Metal welding
- Plastic welding
- Induction heating
- Dielectric heating
- Electrochemical processes
- Plasma discharge processes
- Arc furnaces
- Crack detection processes
- Electricity generation and distribution
- Some motors and speed variators

The European Commission failed to produce an adequate regulatory impact assessment for this Directive. Consequently, when considering this dossier, neither MEPs nor the Council were in full possession of the facts.

Compliance with this Directive will require significant resource in terms of time and money, but will not deliver any benefit to the health and wellbeing of workers.

The use of MRI in the healthcare sector will be curtailed by this Directive. We believe that forcing clinicians to use alternatives such as x-ray and Computerised Tomography (CT) scanning, will increase the cancer risk to these workers.

Exposure of healthcare staff to more hazardous diagnostic systems will be a direct consequence of these EU requirements. Whilst citizens will be denied access to MRI, which is, in many cases, the most effective diagnostic tool.

## **CONCLUSION**

The European Commission is spearheading the better regulation agenda in Europe. The Physical Agents (Electromagnetic Fields) Directive is a prime candidate for fundamental reform under this agenda. We call for a root and branch review of this dossier.

There is not yet a precedent to support calls for a review of a directive that has yet to come into force in Member States.

In the first instance we are requesting:

- a delay to implementation of one year
- a rigorous review of the dossier, involving social partners
- Commitment to action based on the recommendations resulting from the review.

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