



## Draft Directive for the protection of workers from exposure to electro-magnetic fields and waves (EMF)

WEM / ORGALIME Position  
20 March 2003

WEM is the employers' organisation of the metal trades<sup>1</sup> in Europe covering the engineering, manufacturing and technology based companies. WEM regroups national employer organisations from these trades in 15 European countries. ORGALIME represents the mechanical, electrical, electronic and metal working industries of 21 European countries. Between them WEM and ORGALIME represent about 200 000 companies employing some 12 million people, 97% of them are small and medium sized enterprises (SMEs).

### Overview

---

Employers' organizations in Europe recognize that good health and safety management is an essential feature of profitable and sustainable businesses. Engineering industries in Europe are particularly committed to providing safe electrical and electronic products and machinery to their professional customers.

Well-considered legislation provides the foundation for the system and minimum harmonised standards across Member States assists in the development of the single market. However, all health and safety legislative proposals must have a sound scientific basis and be proportionate, in taking into account the interest of all. Without this, society will be faced with additional cost without consequent benefit. This current proposal is one such.

The exposure of workers to EMF at low levels, i.e. below the ICNIRP "*basic restrictions*", is not known to have any detrimental effect to health. And yet this proposal intends to place costly requirements on business without any known demonstrable benefits. Such a proposal will damage the competitiveness of European Industry and will have a disproportionate impact on SMEs.

The current proposal could have the effect of:

- Restricting or even preventing the use of Magnetic Resonance equipment used in health care, welding machines in many small businesses such as in light fabrication
- Preventing essential operations and live-line maintenance on power transmission networks
- Forcing the closure of Chlorine production, plastic presses, induction furnace facilities
- Placing additional conformity assessment burden on all other businesses, especially SMEs.

---

<sup>1</sup> Metal trades means the metalworking, mechanical, electrical and electronics engineering, the aerospace, automotive, computer, communications and shipbuilding industries. In some countries it even includes the steel industry.

There is currently a significant body of EU health and safety legislation, including product safety legislation, which already aim at ensuring a high level of protection against EMF exposure. We believe that in line with the current EU health and safety action plan and better regulation package, attention should be paid to ensuring compliance with existing requirements before bringing forward further legislation.

## **Regulatory Impact Assessment**

---

A comprehensive Regulatory Impact Assessment in line with the newly adopted EU procedures on better regulation must be carried out in order to assist legislators in understanding the real impact of this proposal. A cursory “Fiche d’impact” was produced for the 1994 proposal. However, this was insubstantial and does not bear close examination nor take into consideration the product related legislation, such as 1973/23/EC “Low Voltage” and 98/37/EC Machine safety directives. Therefore, WEM and ORGALIME reiterate their plea for more coherence and consistency in EU policy<sup>2</sup> and once more call on Member States to request a “detailed impact assessment” from the European Commission before launching this new wave of regulation. This will allow a political assessment to be made of the dossier when it is considered by the European Parliament.

It is clear that this directive could have a major impact on a great many businesses, leading to costly measurement and assessments being undertaken, which will use considerable resources but do nothing to improve health and safety.

## **SMEs**

---

The proposal will have a disproportionate effect on SMEs. Except for some activities (power transmission, light fabrication, induction furnaces, medical applications, electrolysis facilities), the occupational exposure to EMF is typically falling below the ICNIRP “Basic Restriction” levels for the vast majority of businesses, including offices (!), which casually use electrical equipment (such as lighting, computers and processing machines). No harmonised method of measurement of EMF exposure is available to date. Nevertheless, every employer would be required to carry out an assessment of EMF exposure, which is highly complex and consequently very expensive (in most cases, the intervention of a third party competent body may be requested). Consequently the impact on SMEs will be significant.

## **Action & Limit Values**

---

A cursory examination of the action and limit values identifies just how complex this issue is and consequently how difficult for SMEs to deal with. This problem is compounded with Limit Values, which are not of themselves directly measurable. The general framework of the Directive and the terminology shall be consistent with the European Recommendation 1999/519/EC to avoid misinterpretation and confusion from employers, workers and workers representatives. In particular, we suggest using the same annexes with the appropriate figures for workers exposure either in the tables and in the notes.

Regardless of the problems this directive will cause for business the Limit Values would not be directly enforceable which would be a significant issue for the Member States’ Labour Inspectors. Consequently WEM and ORGALIME believe that the implementation of this legislation will generate unnecessary administrative burden (risk assessment and conformity assessment procedures) and new technical barriers to trade.

---

<sup>2</sup> See WEM/ORGALIME position paper on the “Coherence of the EU policy with regard to the protection from exposure to electromagnetic fields (EMF)” of 16/12/2002 (Check it at: <http://www.orgalime.org/result.cfm?id=126>).

As described above there are operations, which will expose workers to EMF at levels exceeding the Limit Values. These are vital tasks, which must continue to take place. Examples include live-line working in the electricity supply industry and positioning a patient during an MRI scan for medical diagnostic purposes.

Arguably it is only those workers who are exposed above the Limit Values who should be the subject of concern. Consequently we propose an amendment, which will permit excursions above the limit values. The employer will need to satisfy certain criteria and place increased emphasis on health and safety management of these workers.

## **Health Surveillance**

---

The proposed requirements for health surveillance are ill-considered. Contrary to recently regulated physical agents such as noise and vibrations, adverse effect to health could not be identified at low levels. This is why the Council Recommendation 1999/519/EC of 12 July 1999 recommended a cautionary approach in order to protect the general public. There is no form of health surveillance that can identify acute exposure to EMF. The presence of such a requirement indicates that the principle of the ICNIRP basic restrictions, upon which this proposal is ostensibly based (i.e. being the theoretical point at which biological change could occur) is not properly understood. If there is insufficient energy to effect change at a cellular level then, even if appropriate medical techniques existed by definition, they would not be able to detect any change at the values dealt with in the proposal.

Even if the ICNIRP values are not always met, as may occasionally occur in some occupational situations, it is not possible to identify any acute effects at these levels and so to establish an exclusive cause-effect relationship with EMF exposure. It is therefore appropriate to provide health surveillance only to those workers who are exposed to EMF above the Limit Values. Although there are no specific examinations, which a physician can take, we consider a general medical examination would be appropriate and add to our understanding of this issue.

## **Conclusion**

---

WEM and ORGALIME believe that the present draft Directive is ill conceived and has been re-activated without any consideration of its implications on business or employment. It is surprising that, at a time when the EU is claiming to be reviewing its governance and adopting better regulation principles, such a wide-ranging initiative should be launched without the least regulatory impact assessment. Such an initiative is certainly not in line with the Commission and Member States' vision of promoting a favourable business environment, as stated in the recent Communication on "Industrial policy in an enlarged Europe" and in the letter addressed by Chancellor Schröder, President Chirac and Prime Minister Blair to the Greek Presidency.

- ~ ~ ~ ~ ~ -