

5 July 2010

## **EUROPEAN SOCIAL PARTNER 2<sup>ND</sup> STAGE CONSULTATION ON REVISION OF THE DIRECTIVE ON EXPOSURE TO ELECTROMAGNETIC FIELDS**

### **I. Introduction**

1. On 20 May the European Commission launched the 2<sup>nd</sup> stage consultation of European social partners on the possible amendment of directive 2004/40/EC on the exposure of workers to risks arising from electromagnetic fields (EMF).
2. The social partners are requested to submit an opinion on the content of the legislative and non-legislative initiatives envisaged by the Commission, as follows:
  - Directive to cover all sectors of activity
  - A new set of definitions for adverse health effects
  - A revised system for limit values different from the current Limit Values and Action Values for the range from 0 to 100 kHz
  - A more comprehensive mechanism to facilitate measurements and calculations and to give guidance on taking measurement uncertainties into account
  - Give guidance to ensure simplified but more efficient risk assessments in order to facilitate the evaluation work and also to limit the burden on SMEs
  - Introduce due flexibility by proposing a controlled framework for limited derogations
  - Propose a rationale for medical surveillance
  - Pay due attention to specific cases such as medical applications using magnetic resonance
  - Provide for the introduction of complementary non-binding measures.

### **II. General remarks**

3. BUSINESSEUROPE welcomes the thorough consultation which has taken place with stakeholders preceding the second stage consultation, which has been important in highlighting industry's concerns with the current directive. The analysis provided in the second stage consultation document reflects these concerns and provides an important step on the way to a practical adaptation of the directive.
4. Since the proposals made in the second stage consultation document provide a good basis for improving the directive, BUSINESSEUROPE does not intend to enter into negotiations with the social partners on this issue.



5. Most of the observable effects of exposure to EMF do not result in harm. As stated in the consultation document, there is no conclusive scientific evidence of long-term ill health effects as electromagnetic fields do not accumulate in the human body. Exposure to EMF is not a major source of illness or accidents at work and is therefore not a major risk in many workplaces. For those workplaces where there is a risk, for example where this can cause burns, these should be dealt with adequately.
6. The revised directive must be proportionate to its objective of protecting workers' health and safety, by ensuring that companies concentrate their efforts where there is a real risk to workers' health and safety. This is important to avoid excessive administrative and financial burdens on business, in particular SMEs. The proposals set out by the Commission must be formulated in a clear and coherent way in the new directive.

### **III. Specific remarks**

7. Below BUSINESSEUROPE provides comments on the specific proposals identified in section 4 of the consultation document, as requested by the Commission.

#### *4.1 Coverage of all sectors of activity*

8. For the directive to be effective in protecting workers' health and safety, BUSINESSEUROPE agrees that the requirements of the revised directive should cover all sectors which have to potentially deal with EMF.

#### *4.2 Precise definitions*

9. The difference between effects of exposure to EMF and adverse health effects should be taken into account in the adaptation of the directive. This allows for efforts to be concentrated where there is a real risk to workers' health and safety.
10. As suggested by the Commission, we agree that there is a distinction to be made between effects which are harmful to health and effects which can be detrimental to the safety of the worker. This may be useful in allowing employers to focus efforts on dealing with those effects of exposure to EMF which are actually harmful, as well as taking into account safety aspects.
11. We should avoid a situation in which limit values for exposure to EMF are set not only according to the frequency and intensity of the source of exposure, but also according to the type of work. This would introduce a new concept regarding limit values, which would not be consistent with the other EU directives dealing with exposure to physical agents. In addition, it would be an added burden for companies to assess this, as there would not be one clear limit value, rather it could differ from one work situation to another.



#### 4.3 Exposure limit values

12. We agree with the analysis of the European Commission that the way in which the exposure limit values are expressed in the current directive creates uncertainties for industry. Firstly, most of the values, as provided for in the annex to the directive are overly restrictive and secondly they cannot be measured directly by employers. This means that the cost to employers in establishing whether they exceed the limits would be disproportionate to the potential risk actually faced. This is a key obstacle in terms of implementation of the current directive, for SMEs in particular. Furthermore, experts could reach different findings depending on the measuring methods they use. New exposure limit values therefore need to be less restrictive and directly measurable so that it is easier for employers to make a clear assessment of the situation.
13. As stated in the consultation document, phosphenes, nausea and vertigo are not expected to cause harmful health problems. In general not all physiological sensations can be classified as having harmful health effects. Given that the employer can be held accountable in some member states by sanctions under criminal law for adverse health effects on employees, definitions of such effects should not be included in the directive. Such effects may however affect work performance and as such they are potential, albeit highly individual, risk factors that the employer has to take into account if and when experienced by the employee. In this context, flexibility should be afforded to companies to deal with these in an appropriate and proportionate way. This may include training, information and guidance for staff.
14. A practical approach is needed in terms of limit values and measures to be taken by companies. Where measurements are required, it should be clear to employers which procedure they need to follow, to ensure that they are compliant with the directive:
  - The first step for employers should be to work out whether the processes used in the workplace are likely to exceed the upper exposure limit of zone 1. This is possible by following guidance, written scientific data and standards (e.g. CENELEC) or by checking equipment compliance lists. Such lists identify the types of equipment that will be below the limit values or equipment that is capable of causing exposures to exceed the exposure limits in Zone 1. The employer can then check whether the equipment in the workplace is on the list, allowing him to work out which measures, if any, are required. This type of technical information on equipment is often supplied by the manufacturer.
  - By undertaking the actions above, employers show that they have assessed the situation and have exercised control at the workplace. The directive should therefore clearly state that measuring the exposure of workers to EMF is only necessary if control cannot be demonstrated by other means, for example by following good practice guidance or checking equipment compliance lists.



- Where measurement of workers' exposure to EMF is necessary, i.e. where the upper limit of zone 1 is likely to be exceeded and the employer cannot demonstrate control by other means, this should be possible through a single measurement. This allows an employer to find out in a simple way which zone applies to his specific working environment. Single measurements should also be sufficient if the exposure at different workplaces could be considered as comparable. These changes would reduce the administrative and financial burden of carrying out extensive and complicated measurements. This is particularly important for smaller companies which often need to use experts to make complicated calculations, as this can be costly.
  - This process is in line with the employers' obligations laid down in the framework directive on health and safety at work. This means firstly that employers should avoid risks at the workplace, that they should assess those risks which cannot be avoided and that they should then combat the risks.
  - In the current directive, for an employer to find out if he complies with the limit values, he would have to measure inside human tissue. Therefore, the directive should be adapted to ensure that it includes directly measurable reference values to distinguish between the different zones. This would allow the employer to check compliance with the limit values. As a result he would be able to determine which zone applies to his working environment, which type of risk assessment he needs to undertake, and the obligations as a result of this assessment.
  - Where companies decide to check conformity with inside body limit values, simple procedures are needed. In this context, certain procedures are already well established, with which companies have a good level of experience. These should be applicable in the future.
15. We broadly welcome the new four-tier zoning approach proposed by the Commission. This could help to clarify the steps that need to be taken for the risk assessment and the obligations for individual companies. This would, however, only be an improvement on the current directive if the new system is clear and simple to use for all companies concerned and not only experts. This system will only be effective if the exposure limits are sensibly and appropriately set.
16. As it stands, the proposed system is unnecessarily complex. Referring to zone 0, the phrase "similar to what is acceptable for the public" is too generic and does not refer to any specific rules or recommendations. It would therefore be unclear for companies.
17. One possibility to make the system less complex, which would require a minor amendment, would be to reduce the proposed system from 4 to 3 zones. This would be possible by amending the upper limit of zone 1 for exposures below 1Hz, thereby merging zones 0 and 1. This would help companies in determining when they do not need to take action, so that they can focus their attention on more significant risks.



18. The zoning system follows the logic of the proposal of the German Professional Associations Regulation for Occupational Health and Safety (BGV B11)<sup>1</sup> in respect of the measures to be taken, while the limit values follow the proposal of the German Ministry for Employment and Social Affairs (BMAS)<sup>2</sup>. This is an improvement, as the BMAS proposal is based on a specific type of value (peak-value, which is the maximum value that a waveform attains), which are more used in practice than the ICNIRP (International Commission on Non-Ionizing Radiation Protection) recommended values and are directly measurable. Changing the basis of the limit values in the directive to the ones proposed by BMAS avoids complex processes of calculation, which is a considerable simplification.
19. This being said, it should still be possible for those individual companies that wish to, to continue using ICNIRP basis values (current density in human tissue) to show compliance with the directive alternatively to the BMAS-proposal. Although these are not directly measurable, they are sometimes a more favourable reference figure for risk assessment, as they allow for the possibility of using certain equipment.
20. Where companies choose to measure inside body limit values, some consideration should be given to introducing the approach of the German BGV B11 proposal which conducts measurements not only with respect to the whole human body but also to parts thereof (head, arms, legs). The limit values under this proposal are much higher for certain parts of the body. This allows more leeway for checking whether certain activities which affect only parts of the body exposed to electromagnetic fields, e.g. the hand/arm area in welding activities, are consistent with the limit values.

#### *4.4 Measurements and calculations*

21. BUSINESSEUROPE is glad to see that the Commission acknowledges that measurement of EMF can be affected by a high margin of error. This can have legal implications. Clear guidance for companies will be necessary on this issue.

#### *4.5 Guidance for risk assessments*

22. The adaptation of the directive should lead to a more simple risk assessment procedure, which is proportionate to the real risks related to workers' exposure to EMF. This will help companies to better understand their obligations in view of the directive, thereby facilitating compliance. This is crucial in ensuring that the directive meets its objectives.
23. Administrative and financial burdens should be limited, in particular where extensive risk assessment is not required. Appropriate guidance and awareness-raising is necessary in this respect, so that companies are better equipped to deal with situations of exposure to EMF and to undertake the necessary risk assessment.

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<sup>1</sup> Accident Prevention Regulation: Electromagnetic fields - <http://www.systronemv.de/NISV/BGV-B11.pdf> June 2001

<sup>2</sup> Report of the EMF working group of the German Federal Ministry of Labour and Social Affairs: Electromagnetic Fields at workplaces – A new scientific approach to occupational health and safety. October 2009



24. Clear guidance will be needed in particular to identify situations where the upper limit of zone 1 is likely to be exceeded, if this becomes the basis for assessment.
25. The current reference in Article 4 to the CENELEC risk assessment standards appears to imply that these should be used for all risk assessments. However, there is no single method for conducting a risk assessment as they vary according to the circumstances and the level of risk that is faced. Therefore, it should be made clear that the CENELEC standards are advisory and do not constitute an obligatory approach.

*4.6 Due flexibility in a controlled working environment and*

*4.8 The specific case of medical applications and related activities using MR technology*

26. We agree with the Commission that it is necessary to build an element of flexibility into the directive and that this should be available for those industrial processes which override the upper limit of zone 2. As suggested, this could be counterbalanced so that employers are able to show that they are controlling the situation in other ways, for example through work organisation and staff training.
27. BUSINESSEUROPE believes that in order to retain the scientific integrity of the directive, the introduction of flexibility or derogations must be applied equally to all industry sectors and processes.
28. To ensure that the revised directive provides a solution for all companies and sectors which have to potentially deal with EMF, the exposure limits should be appropriate for all concerned and based on sound scientific reasoning.
29. Stakeholders should be involved in the development of the annex to the directive, which will outline the conditions for this flexibility.
30. We welcome the recognition that SCENIHR's latest work finds that there is no consistent evidence for adverse long term effects on adult human bodies. It is therefore important that the directive clearly states that it does not concern long-term effects, as is the case in the current text.
31. Despite this recognition, the consultation document recommends a precautionary measure to avoid presence in an exposed zone whenever a workers' presence is not necessary to carry out an activity. However, according to the 2000 EC Communication on the Precautionary Principle<sup>3</sup>, there are a number of tests that have to be passed before a precautionary approach is introduced. Given the scientific conclusions of SCENIHR, we do not feel that a precautionary approach is merited. It is important for the integrity of the Directive that precautionary measures are only introduced on the basis of scientific evidence.

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<sup>3</sup> [http://ec.europa.eu/dgs/health\\_consumer/library/pub/pub07\\_en.pdf](http://ec.europa.eu/dgs/health_consumer/library/pub/pub07_en.pdf)



#### *4.7 Medical surveillance*

32. The consultation document rightly recognises the challenges that arise with requiring medical surveillance for effects that are generally minor and transitory in nature. Apart from burns, it is difficult to identify effects from exposure to EMF at the workplace in routine medical surveillance once the exposure is over.
33. As proposed by the Commission, Article 8 of the current directive should therefore be revised to reflect the fact that the only circumstances in which medical surveillance may be appropriate is when there has been a gross overexposure to a high frequency field that has the potential to cause burns.

#### *4.9 Non-binding measures*

34. The consultation document rightly recognises the complexity of this matter. The majority of employers that this directive will have impact on will not have access to the necessary expertise. To help companies comply with the directive, guidance is therefore necessary. Non-binding measures are crucial in this respect, such as sector specific guidance and exchange of good practices. Sectoral guidance for the safe use of equipment emitting EMF would also be helpful.
35. We agree that the establishment of an appropriate working party under the Advisory Committee on Safety and Health at Work to develop guidance would be useful.

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