

EWA Position on the revision of DIRECTIVE 2004/40/EC (EMF)

October 18, 2011

EWA position on the current developments with regard to the revision process of 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)

In the design of metal constructions, electric welding may be considered as the most appropriate method for joining and/or surfacing. The contents of the original EMF Directive, published in 2004, have put some burden on the shoulders of both the users and manufacturers of electric welding equipment, by necessitating the application of complex methods to show compliance. However, the latest drafts for the revised directive have even raised major concerns that the application of many welding processes may be severely restricted or banned in Europe.

These concerns are based on the process of the revision work, as well as on the contents of the latest drafts. The frequent issuing of uncoordinated new drafts on short notice makes it impossible for the parties involved to provide well founded comments for discussion and appropriate consideration. This severely imperils the development of a substantially improved EMF Directive.

As for the contents, it appears that the latest proposals considerably deviate from ICNIRP (the International Commission on Non-Ionizing Radiation Protection), whose guidelines are claimed to be the basis of the exposure limits system of the EMF Directive. This view is supported by written indications from ICNIRP to the European Commission that parts of the latest drafts were not in line with ICNIRP recommendations.

Recommendations for further revision activities

The European welding industry shall sensitize their national delegations to the Council Working Party for Social Questions (SQWP) and to the European Parliament with regard to the potential economic damages that may be induced by the latest developments within the revision process and request adequate national activities.

- □ The return to a coordinated and transparent approach to the revision process shall be ensured.
- □ Adequate timeframes for the evaluation of new proposals and the assessment of the resulting impact shall be provided.



- Deviations from the ICNIRP principles shall be foreclosed. This includes the misapplication of ICNIRP values that deviates from their original purpose, e.g. the use of ICNIRP Reference Levels as exposure limits or the application of dedicated limits (e.g. for the head) to other parts of the body.
- □ The additional, legally binding inclusion of limits for peripheral nerve tissues in the directive shall be very carefully scrutinized, as both ICNIRP and other leading scientists in the field of EMF acknowledge that currently no conversion factor for peripheral nerve tissue exists and that it is practically impossible to assess limits for this tissue type. This is exceptionally crucial for manual welding workplaces, where the welders hand needs to be close to (gripping) the welding torch.
- □ Adequate consideration of the fact that EMF assessment is scientifically complex, and that simplifications in order to create "simple legislation" generally result in conservative approaches, i.e. that the actual exposure to EMF is overestimated.
- □ While the principle of providing simple methods to assess the majority of noncritical workplaces shall be supported, the possibility of showing compliance by using more realistic methods for complex situations (e.g. non-uniform field distribution around welding cables, non-sinusoidal signals, ...) must not be excluded by the directive.

Such exclusion would lead to situations where no risk due to EMF exists, but the respective working procedure would be banned as compliance can not be shown by the overly conservative system provided in the directive.