

Safety and health at work: exposure of workers to optical radiations

1992/0449B(COD) - 18/04/2005 - Council position

The Council's common position follows the lines of the Commission's proposal, even if its structure differs as a result of the splitting of the proposal and if some changes have been introduced due to the evolution of the technical progress and of the scientific knowledge in this field since the adoption in 1994 of the Commission proposal.

Owing to the splitting of the proposal, the common position is concerned only with the specific minimum requirements for the protection of workers from risks to their health and safety arising or likely to arise from exposure to optical radiation.

The common position adopts a different approach for exposure to artificial sources and for natural sources. In the case of exposure to artificial sources, the common position sets exposure limit values (ELVs) which are based directly on health effects and biological considerations. Compliance with these limits will ensure that workers exposed to optical radiation are protected from all known harmful effects on their health. These values are very conservative and largely based on the ICNIRP guidelines and recommendations for limiting exposure to non-ionising radiation. These scientifically based guidelines are designed to prevent the acute and long-term effects to the eyes and the skin that can occur at high levels of exposure. The ELVs prescribed in the ICNIRP Guidelines correspond with those developed by other independent scientific advisory bodies. Because of the conservative nature of the

recommended ELVs for exposure to optical radiation, the common position abstains from introducing lower action values as it was the case for exposure to electromagnetic fields (Directive 2004/40/EC).

Since the application of ELVs is not deemed appropriate in the case of exposure to natural sources of optical radiation, for instance the exposure to the sun radiation or natural fires, the common position emphasises the importance of the information and training of the workers, of the *ex ante* assessment of risks and of the subsequent preventive measures in order to eliminate or reduce the effects of the exposure to natural sources.

The common position describes the preventive measures needed to reduce the risks to which workers are exposed. These preventive measures are primarily based on the employer's obligation to identify and assess the various risks resulting from exposure of workers to optical radiation during their work. One of the main elements in the common position is therefore the assessment of the levels of optical radiation to which workers are exposed, which may require measurements and/or calculations. In this connection, the common position includes instructions concerning the methodology to be applied in order to assess the levels of exposure: the standards and recommendations of IEC, CEI or CEN should be used and, if these are not available, national or international science-based guidelines should be followed. Moreover, in order to avoid unnecessary burden to the enterprises, the assessment may take account of data provided by manufacturers of the equipment producing optical radiation where it is covered by a relevant Community Directive. On the basis of the risk assessment, and unless the assessment carried out demonstrates that the exposure limit values are not exceeded and safety risks can be excluded, the employer is required to devise and implement an action plan comprising technical and/or organisational measures intended to prevent exposure exceeding the limit values.

The common position includes detailed provisions on information and training for workers exposed to risks from optical radiation. It also imposes “appropriate health surveillance” for workers who might suffer adverse health or safety effects.

The main differences between the common position and the Commission’s amended proposal are as follows:

- the new structure due to the fact that optical radiation is dealt with in a specific directive;
- the restructuring and redefinition of the exposure limit values, including the deletion of the action value and the threshold level. This was done in order to bring the provisions of the directive in line with the latest technical and scientific developments in the matter;
- the Tables and provisions in the Annexes which closely follow the ICNIRP recommendations. In the very limited number of cases where ICNIRP did not make a quantifiable recommendation, namely for special situations with coherent optical radiation (lasers), those from IEC were introduced. It must be noted that there are few areas in occupational health and safety where there is such widespread agreement among national and international health advisory authorities concerning safe levels of exposure;
- the reference to standards, recommendations and science-based guidelines for the assessment, measurement and calculation of the levels of exposure to artificial sources of optical radiation to be done in the context of the risk assessment;
- the abolition of the requirement to consider certain activities as presenting an increased risk to the responsible authority;
- the granting of outdoor workers the same level of protection as indoor workers.