



European Legal basis for Health and Safety at Work

Joconda Project

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The European Union (EU) has established a set of base rules in order to protect the health and safety of workers

My opinion is that such legal obligations for workers and employers can also be applied for independent workers and have to be included in all contracts.

So we shall have the minimum requirements for safety and health, to limit accidents at work and occupational diseases for everybody and any kind work conditions.

Summary of the different rules (See SCADPLUS summary of the European legislation: employment and social policy)

Health, hygiene and safety at work

1. General rules

Council Directive [89/391/EEC](#) of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work

This Directive also improves the training, information and consultation of workers.

SUMMARY

This Directive establishes base rules on protecting the health and safety of workers
*. The measures provided in the Directive aim to eliminate the risk factors for occupational diseases and accidents.

These measures apply to all sectors of activity, both public and private, with the exception of certain specific activities in the public (e.g. army, police, etc.) and civil protection services.

Employers * are obliged to ensure the health and safety workers in every aspect related to the work, including if they enlist external companies or persons. Member States may limit this responsibility in the case of force majeure *.

The employer shall establish means and measures for protecting workers. These involve activities of prevention, information and training workers, particularly to:

- avoid risks or manage those risks that cannot be avoided;
- give appropriate instructions to workers by promoting common protective measures;
- adapt working conditions, equipment and working methods by taking into account developments in techniques.

The protection means and measures should be adapted in cases where the working conditions change. In addition, the employer should take into account the nature of the activities of the company and the capabilities of the workers.

If workers from several companies work in the same work place, the different employers shall cooperate and coordinate their protective measures and risk prevention measures.

In addition, activities of first aid, fire-fighting and the evacuation of workers in serious and immediate danger must be adapted to the nature of the activities and to the size of the company. The employer must inform and train those workers who could be exposed to serious and immediate danger.

The employer shall establish protective and preventative services in their company or establishment, including with regard to activities of first aid and reacting to serious danger. The employer shall therefore appoint one or several trained workers to ensure that the measures are followed or to call the external services.

Monitoring the health of workers is ensured by the measures fixed in accordance with national legislation and practice. Each worker may request a health check at regular intervals.

Directive 89/391/EEC changed the practical perspective of the protection of the health and safety of workers by introducing an integrated preventive approach and by making ongoing improvement of health and safety conditions at work a requirement.

This new approach is based on the fundamental principles which the framework Directive 89/391/EEC introduced, namely, employer responsibility, prevention, information, training, consultation and participation of workers.

Workers' obligations

Each worker must take care of their own health and security and that of persons affected by their acts or by their omissions at work. In accordance with the training given and the instructions of their employers, in particular workers must:

- use equipment, tools and substances connected to their activity of work correctly;
- use personal protective equipment correctly;
- refrain from disconnecting, changing or removing arbitrarily safety devices fitted;
- immediately inform the employer of any work situation which represents a serious and immediate danger.

2. CHEMICAL, PHYSICAL AND BIOLOGICAL AGENTS

2.1. Exposure to chemical agents

1) OBJECTIVE

To lay down minimum requirements for the protection of workers from risks to their safety and health arising, or likely to arise, from the effects of chemical agents that are present at the workplace or as a result of any work activity involving chemical agents.

2) ACT

Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) [Official Journal L 131 of 05.05.1998].

Directive 80/1107/EEC on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work, along with Directives 88/642/EEC and 82/605/EEC (exposure to metallic lead and its ionic compounds) which are both individual Directives within the meaning of Article 8 of Directive 80/1107, have been included in Directive 98/24/EC.

These Directives have been repealed in compliance with Article 13 of Directive 98/24/EC since 05.05.2001.

Directive 98/24 has also repealed Directive 88/364/EEC on the protection of workers by the banning of certain specified agents and/or certain work activities.

2.2. Exposure to noise

ACT

Directive 2003/10/EC of the European Parliament and of the Council of 6 February 2003 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise)

Seventeenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC [See amending acts].

This Directive lays down minimum requirements for the protection of workers against the risks resulting from exposure to noise, and notably risks to hearing.

SUMMARY

EXPOSURE LIMIT VALUES AND EXPOSURE ACTION VALUES

The physical parameters used to measure noise are as follows: peak sound pressure (maximum value of instantaneous noise pressure), daily noise exposure level and weekly noise exposure level.

The exposure limit value is fixed at 87 decibels (taking into account the attenuation provided by the individual hearing protectors worn by the workers) and the exposure action values are fixed at 80 decibels (lower value) and 85 decibels (upper value).

OBLIGATIONS OF EMPLOYERS

Determination and assessment of risks

In carrying out the obligations laid down in the framework Directive on the improvement of the health of workers at work, the employer, via the intermediary of the competent services, must assess and, if necessary, measure the levels of noise to which workers are exposed. The results of this assessment must be recorded on a suitable medium and kept up to date on a regular basis.

The employer must give particular attention, when carrying out the risk assessment, to the following:

- the level, type and duration of exposure, including any exposure to impulsive noise;
- the exposure limit values and the exposure action values;
- any effects concerning the health and safety of workers belonging to particularly sensitive risk groups;
- as far as technically achievable, any effects on workers' health and safety resulting from interactions between noise and work-related ototoxic substances, and between noise and vibrations;
- any indirect effects on workers' health and safety resulting from interactions between noise and warning signals or other sounds;
- information on noise emission provided by manufacturers of work equipment in accordance with the relevant Community directives;
- the existence of alternative work equipment designed to reduce the noise emission;
- the extension of exposure to noise beyond normal working hours under the employer's responsibility;
- appropriate information obtained following health surveillance;
- the availability of hearing protectors with adequate attenuation characteristics.



Provisions aimed at avoiding or reducing exposure

Taking account of technical progress and of the availability of measures to control the risk at source, the risks arising from exposure to noise must be eliminated at their source or reduced to a minimum. The reduction of the basic risks must be based on the general principles of prevention set out in Directive 89/391/EEC and take into account in particular:

- other working methods that require less exposure to noise;
- the choice of appropriate work equipment;
- the design and layout of workplaces and work stations;
- adequate information and training to instruct workers to use work equipment correctly in order to reduce their exposure to noise to a minimum;
- noise reduction by technical methods: reducing airborne noise (shields, enclosures, sound-absorbant coverings) and reducing structure-borne noise (dampening, isolation);
- appropriate maintenance programmes for work equipment, the work place and workplace systems;
- organisation of work to reduce noise: limitation of the duration and intensity of exposure and appropriate work schedules with adequate rest periods.

Workplaces where workers are likely to be exposed to noise exceeding the exposure action values should be marked with appropriate signs and access to them should be restricted.

Where, owing to the nature of the activity, a worker benefits from the use of rest facilities under the responsibility of the employer, noise in these facilities must be reduced to a level compatible with their purpose and the conditions of use.

Personal protection

If the risks arising from exposure to noise cannot be prevented by other means, properly fitting individual hearing protectors must be made available to workers and used by them in accordance with Directive 89/656/EEC on the use of personal protective equipment:

- where noise exposure exceeds the lower exposure action values, the employer must make individual hearing protectors available to workers;
- where noise exposure matches or exceeds the upper exposure action values, individual hearing protectors must be used;
- the individual hearing protectors must be so selected as to eliminate the risk to hearing or to reduce the risk to a minimum.

Limitation of exposure

Under no circumstances may the exposure of the worker exceed the exposure limit values. If, despite the measures taken to implement this Directive, exposures above the exposure limit values are detected, the employer must:

- take immediate action to reduce the exposure to below the exposure limit values,
- identify the reasons why overexposure has occurred and amend the protection and prevention measures in order to avoid any recurrence.

Worker information and training

The employer must ensure that workers who are exposed to noise at work at or above the lower exposure action values, and/or their representatives, receive information and training relating to risks resulting from exposure to noise concerning, in particular:

- the nature of such risks;

- the measures taken to implement this Directive in order to eliminate or reduce to a minimum the risks from noise, including the circumstances in which the measures apply;
- the exposure limit values and the exposure action values;
- the results of the assessment and measurement of the noise carried out, together with an explanation of their significance and potential risks;
- the correct use of hearing protectors;
- why and how to detect and report signs of hearing damage;
- the circumstances in which workers are entitled to health surveillance and the purpose of health surveillance;
- safe working practices to minimise exposure to noise.

Consultation and participation of workers

Consultation and participation of workers and/or of their representatives must take place on the matters covered by this Directive, in particular:

- the assessment of risks and identification of measures to be taken;
- the actions aimed at eliminating or reducing risks arising from exposure to noise;
- the choice of individual hearing protectors.

2.3. Exposure to mechanical vibration

1) OBJECTIVE

Improving the protection of workers against the risks arising from exposure to mechanical vibration by laying down minimum requirements with regard to the protection of health and safety.

2) ACT

Directive 2002/44/EC of the European Parliament and of the Council of 25 June 2002 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (vibration) (sixteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) [Official Journal L 177, 06.07.2002]

2.4. Protection of workers exposed to asbestos

Activities related to the treatment and processing of asbestos can pose risks to health. Workers exposed to asbestos must be protected under the best possible conditions, by limits on exposure and by appropriate procedures.

ACT

Directive 2009/148/EC of the European Parliament and of the Council of 30 November 2009 on the protection of workers from the risks related to exposure to asbestos at work.

SUMMARY

The exposure of workers to asbestos dust or materials containing asbestos poses risks to their health. This Directive establishes protective and preventive rules intended to limit these risks.

The term asbestos applies to the following substances: asbestos actinolite, asbestos grunerite, asbestos anthophyllite, chrysotile, crocidolite, and asbestos tremolite.

Exposure to asbestos

This Directive prohibits:

- the application of asbestos by means of the spraying process and all activities that involve using low-density (less than 1 g/cm³) insulating or soundproofing materials;
- the extraction, manufacture and processing of asbestos, including products containing asbestos.

However, the processing and disposal of products resulting from demolition and asbestos removal shall be permitted. The exposure of workers must be reduced to a minimum, with regard to:

- the number of workers;
- work processes, which must not produce dust, especially in the air;
- premises and equipment, which must be cleaned and maintained regularly;
- storage and transport, in suitable sealed packing;
- the collection of waste, which must be removed quickly, labelled and processed in accordance with Directive 91/689/EEC on hazardous waste.

Limit values for exposure to asbestos

Employers shall ensure that no worker is exposed to an airborne concentration of asbestos in excess of 0.1 fibres per cm³ as an 8-hour time-weighted average (TWA).

Risk assessment

A risk assessment must be carried out before beginning an activity involving exposure to asbestos dust or to materials containing asbestos. This assessment shall be based on representative sampling of the worker's personal exposure.

The measuring of asbestos in the air shall take account only of fibres with:

- a length of more than 5 micrometres and a breadth of less than 3 micrometres;
- a length/breadth ratio greater than 3:1.

Working procedure

Before the start of the work, the employer must inform its national authorities of:

- the location of the worksite,
- the type and quantity of asbestos,
- the activities and processes involved,
- the number of workers,
- the duration of the work,
- measures taken to limit exposure.

The place where the work is carried out must be accessible only to workers – it must be demarcated and signed. In addition, it must be a no smoking area.

Demolition or asbestos removal work shall take place according to a pre-established plan aimed at guaranteeing the removal of asbestos before demolition techniques are applied, and at reducing the risks to a minimum.

Workers shall receive training particularly as regards the properties of asbestos and its effects on health, and as regards emergency, decontamination and medical surveillance procedures.

2.5. Protection of workers from exposure to biological agents

The health and safety of workers exposed to biological agents is the subject of specific protection. This Directive lays down rules concerning risk assessment and limitation if such exposure cannot be avoided.

ACT

Directive 2000/54/EC of the European Parliament and the Council of 18 September 2000 on the protection of workers from risks related to exposure to biological agents at work (seventh individual directive within the meaning of Article 16(1) of Directive 89/391/EEC).

SUMMARY

This Directive protects the health and safety of workers exposed to biological agents * whilst undertaking their work.

Biological agents are classified into four risk groups, according to the risk of infection involved:

- group 1 includes agents that are unlikely to cause human disease;
- group 2 concerns agents that can cause human disease but are unlikely to spread to the community, for which effective treatment is available;
- group 3 includes agents that can cause human disease and may spread to the community, although prevention or treatment is possible;
- group 4 concerns agents that can cause severe human disease. They present a high risk of spreading to the community, for which there is no effective treatment

Risk assessment

Risk assessment must be carried out for all professional activities that may expose workers to biological agents. The nature, degree and duration of exposure shall be determined in order to plan preventive measures.

The employer shall participate in regular risk assessments.

Employers' obligations

If the activity so permits, the employer must replace the harmful agents with agents that are not dangerous or are less dangerous, considering their conditions of use and the level of scientific knowledge thereof.

Moreover, if there is a risk to the safety or health of workers, the employer shall ensure that such risk is reduced to a sufficiently low level. The employer may:

- limit the number of workers exposed to a minimum;
- control the release of agents into the workplace, using technical procedures;
- organise collective and/or individual protection measures;
- prevent or reduce accidental release outside the workplace, using hygiene measures;
- install risk warning signs;
- draw up plans to deal with accidents;
- provide for the collection, storage and disposal of waste;
- arrange for safe handling conditions and transport of biological agents.

The employer is obliged to keep a list of workers exposed to group 3 and/or group 4 agents. This list may be kept for up to 40 years in some cases. Furthermore, the employer shall inform the competent national authority when group 2, group 3 or group 4 biological agents are used for the first time.

Lastly, the employer shall ensure that workers and/or their representatives are sufficiently informed and trained, concerning:

- potential risks to health;
- precautions to be taken to prevent exposure;
- hygiene rules;
- use of protective equipment and clothing;
- measures to be taken in the case of incidents.

If there is an accident or incident, the employer shall inform workers and/or their representatives as soon as possible of the causes, risks and measures to be taken.

2.6. Exposure to electromagnetic fields

This Directive lays down minimum requirements concerning the protection of workers from the risks arising from exposure to electromagnetic fields and waves.

ACT

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) [See amending acts].

SUMMARY

This Directive forms part of a "package" of four directives on the exposure of workers to the risks arising from physical agents: noise, vibration, electromagnetic fields and optical radiation.

It is an individual directive under framework Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work.

SCOPE

The Directive provides for measures to protect workers from the risks related to electromagnetic fields. However, it does not address the long-term effects, including the carcinogenic effects, that could result from exposure to electrical, magnetic and electromagnetic fields, for which there is no conclusive scientific data establishing a causal link.

Moreover, the Directive does not yet provide for exposure limits for static magnetic fields, for which further scientific evaluations are awaited.

The measures foreseen create a minimum basis of protection for all workers in the Union, leaving the Member States the option of keeping or adopting more favourable provisions. Moreover, its implementation cannot be used to justify any regression of the (possibly more favourable) provisions that apply in each Member State before its entry into force.

EXPOSURE LIMIT VALUES AND ACTION VALUES

The Directive lays down two types of value for exposure of workers:

- "exposure limit values" defined in Table 1 of the Annex to the Directive on the basis of the various frequencies that are recognised as having harmful effects on the human cardiovascular system or the central nervous system or as being capable of causing whole-body heat stress or excessive localised heating of tissues;
- "action values", or values above which employers must take the measures specified in the Directive. Compliance with these action values will ensure compliance with the relevant exposure limit values. These action values are obtained from the guidelines laid down by the International Commission on Non-Ionising Radiation Protection (ICNIRP). They are set out in Table 2 of the Annex to the Directive (13 frequency ranges that apply to all electromagnetic fields and are based on directly measurable parameters).

OBLIGATIONS OF EMPLOYERS

The Directive lays down various types of obligation with which employers must comply. Determination of exposure and assessment of risks

- assessment, measurement and calculation, by the appropriate services and at regular intervals, of the levels of electromagnetic fields to which workers are exposed;
- saving of the results of this assessment on a suitable data storage medium so that they can be consulted at a later stage;
- consideration in the assessment of risks (among other things, of the level, frequency spectrum, duration and type of exposure), of the indirect effects, such as interference with medical electronic equipment and devices, fires and explosions resulting from ignition of flammable materials.

Provisions designed to avoid or reduce risks

Once the action values are exceeded, employers must devise and implement an action plan comprising technical and/or organisational measures intended to prevent exposure from exceeding the exposure limit values (modification of working methods, choice of appropriate work equipment, better design of work stations, etc.). However, employers are not obliged to do so if they prove that there are no risks to the health of workers.

If, despite the measures taken by the employer to limit the risks, the exposure limit values are exceeded, the employer must take immediate action in order to reduce exposure to an authorised level.

Worker information and training

Exposed workers or their representatives must receive all necessary information and training, particularly relating to the outcome of the risk assessment, the measures taken by the employer, safe working practices, the detection of adverse effects and the circumstances in which workers are entitled to health surveillance.

Consultation and participation of workers

The Directive restricts itself to the requirements laid down in framework Directive 89/391/EEC.

MISCELLANEOUS PROVISIONS

Health surveillance

The Directive provides for the requirement of appropriate surveillance of the health of exposed workers with the objective of preventing any adverse effects due to exposure to electromagnetic fields.

Where exposure exceeds the limit values, a medical examination is foreseen. If it transpires that the health of the workers concerned has been harmed as a result of this exposure, a reassessment of the risks must be carried out.

Measures are also foreseen to ensure that the doctor responsible for the health surveillance has access to the results of the risk assessment, while the workers concerned will be able to have access to their own personal health records, at their request.

Sanctions

The Member States must provide for adequate sanctions in the event of infringement of the national provisions transposing the Directive.

Reports

Member States must provide a report to the Commission every five years on the practical implementation of the Directive, indicating the points of view of the social partners.

Every five years, the Commission must inform the European Parliament, the Council, the European Economic and Social Committee and the Advisory Committee on Safety and Health Protection at Work of the content of the reports of the Member States. It must also send them an assessment of developments in this field, in particular as regards exposure to static magnetic fields.

2.7. Risk of explosive atmospheres



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This directive establishes and harmonise minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres.

ACT

Directive 1999/92/EC of the European Parliament and of the Council of 16 December 1999 on minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres (15th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC).

SUMMARY

An "explosive atmosphere" is a mixture with air, under atmospheric conditions, of flammable substances in the form of gases, vapours, mists or dusts in which, after ignition has occurred, combustion spreads to the entire unburned mixture.

The employer must take technical and/or organisational measures to prevent the formation of explosive atmospheres, prevent the ignition of explosive atmospheres, and reduce the effects of an explosion in such a way that workers are not at risk.

The employer must ensure that a health and safety protection document, describing explosion protection measures and satisfying the requirements of Directive 89/391/EEC, is prepared and kept up to date.

Workers and/or their representatives must be informed of all the measures to be taken for their safety and health at work.

The employer must take the necessary steps to ensure that workers potentially at risk from explosive atmospheres receive appropriate training.

Work equipment for use in places where explosive atmospheres may occur must comply with the minimum requirements laid down in the Annex to the Directive.

Where workplaces which contain places in which explosive atmospheres may occur are already in use before the entry into force of the proposed Directive, they must comply with its minimum requirements no later than three years after its entry into force.

After consulting the Advisory Committee on Safety, Hygiene and Health Protection at Work, the Commission must draw up practical guidelines in a guide to good practice of a non-binding nature.

Member States must, on request, endeavour to make relevant information available to employers, with particular reference to the guide to good practice.

Member States must report to the Commission every five years on the practical implementation of the Directive, indicating the points of view of employers and workers. The Commission must inform the European Parliament, the Council, the Economic and Social Committee and the Advisory Committee on Safety, Hygiene and Health Protection at Work.

Annex I contains the classification of places where explosive atmospheres may occur. Annex II describes the minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres and criteria for the selection of equipment and protective systems. Annex III presents the warning sign for places where explosive atmospheres may occur.

2.8. Dangers arising from ionising radiation

This Directive is designed to establish uniform safety standards to protect the health of workers and the general public against the dangers of ionising radiation.

ACT

Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation.

SUMMARY

Title I defines all of the technical terms to be found in the document.

The Directive applies to all practices which involve a risk from ionising radiation, either from an artificial source or from a natural source where natural radionuclides are processed because of their radioactive, fissile or fertile properties.

Each Member State must require the use of these practices to be reported, except in exceptional cases as specified in the Directive.

Each Member State must require prior authorisation to be obtained for practices that may involve a risk of ionising radiation, subject to the exceptions provided for in the Directive.

Prior authorisation is required for the disposal, recycling or reuse of radioactive substances or materials containing radioactive substances resulting from any practice subject to compulsory reporting or authorisation, unless the clearance levels established by the competent national authorities are complied with.

Before they are adopted or approved for the first time, Member States must ensure that all new classes or types of practices resulting in exposure to ionising radiation are justified on the basis that their economic, social or other benefits outweigh any adverse effects they may have on health.

Member States shall not permit radioactive substances to be deliberately added during the production of foodstuffs, toys, personal ornaments or cosmetics, neither shall they permit such goods to be imported or exported.

Where appropriate, efforts to ensure optimum radiological protection should include dose constraints.

Persons under the age of 18 may not be assigned to any work which would make them exposed workers.

The effective dose for exposed workers is limited to 100 mSv over a period of five consecutive years and must not exceed 50 mSv in any one year.

As soon as a pregnant woman or nursing mother informs an undertaking of her situation, she may not be assigned to work involving a significant risk of bodily radioactive contamination.

In exceptional circumstances, excluding radiological emergencies, to be evaluated on a case-by-case basis, the competent authorities may, where specific operations so require, authorise a certain number of designated workers to exceed the individual occupational exposure limits.

Each Member State must take reasonable steps to ensure that the contribution made by each practice to the exposure of the population as a whole is kept as low as reasonably achievable in view of the economic and social factors. The total of all such contributions must be assessed regularly.

The Directive establishes exposure prevention measures:

- the competent authorities must draw up appropriate guidelines for classifying controlled and supervised areas in a given situation, and undertakings must monitor working conditions closely within these areas;
- Member States must require undertakings to provide information to workers who fall into either of the two distinct categories of exposed workers;
- the undertaking is responsible for assessing and implementing arrangements for the radiological protection of exposed workers.

Exposure assessment involves monitoring the workplace (measuring external dose rates and indicating the nature and quality of the radiation in question, as well as measuring the air concentration and surface density of contaminating radioactive substances and indicating their nature and their physical and chemical states), monitoring the individual (systematic for the most exposed workers) and monitoring in the event of accidental or emergency exposure.

The medical surveillance of exposed workers is to be based on the principles that govern occupational medicine generally.

Each Member State must determine the procedure for appealing against findings and decisions made on the basis of the Directive.

Each Member State must:

- establish one or more systems for carrying out inspections in order to enforce the provisions introduced under the Directive, as well as to initiate monitoring and intervene whenever necessary;
- require workers to be given access, at their request, to the results of any individual monitoring relating to them;
- require the necessary means for proper radiation protection to be made available to the units responsible.

Each Member State must create the conditions necessary to ensure optimum protection of the population and to apply the fundamental principles governing operational protection of the population.

Member States must ensure that consideration is given to the fact that radiological emergencies may occur in connection with practices carried out within or outside their territory and that these may affect them. Each Member State must ensure that appropriate action plans are drawn up at national or local level, and that these are tested at regular intervals.

2.9. Exposure to artificial optical radiation

The European Union (EU) lays down minimum harmonised requirements for the protection of workers against the risks arising from exposure to artificial optical radiation (e.g. UVA, laser, etc.)

ACT

Directive 2006/25/EC of the European Parliament and of the Council of 5 April 2006 on the minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents (artificial optical radiation) (19th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC).

SUMMARY

This Directive is part of a "package" of four Directives regarding the exposure of workers to the risks arising from physical agents: noise, vibration, electromagnetic fields and optical radiation.

This is a Directive under framework Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work.

Risks of optical radiation and scope

The exposure of workers to artificial optical radiation *, laser *, laser radiation * and non-coherent radiation * can have chronic adverse effects on the eyes and skin.

This Directive reduces the level of exposure to this radiation firstly by the introduction of preventive measures in the design of workstations, in order to reduce the risks at source. It also fixes exposure limit values for workers exposed to non-coherent radiation and laser radiation (Annex 2).

Obligations of employers

•Assessment of the level of radiation.

Firstly, the employer assesses or measures the levels of optical radiation to which employees are exposed so that they can be reduced if they exceed the applicable limits. He measures them on the basis of the standards of the International Electrotechnical Commission (IEC), the International Commission on Illumination (CEI) and the European Committee for Standardisation (CEN) or, failing that, using available national or international science-based guidelines.

•Reduction of the risks.

Secondly, the employer must reduce the level of radiation if the assessment indicates any possibility that the exposure limit values have been exceeded, for example by choosing a different material or limiting the duration of exposure.

•Worker information and training.

The workers or their representatives receive the necessary information and training, for example in the use of protective equipment.

•Consultation and participation of workers.

Employers must consult workers or their representatives in advance with regard to the protection of the safety and health of workers. They may propose measures to improve this protection and even enlist the competent authorities if they consider that the health

protection offered by the employer is not adequate (in accordance with framework Directive 89/391/EEC).

Health surveillance

The health of workers is subject to surveillance carried out by a doctor, as is any risk arising from exposure to optical radiation, in accordance with the relevant national legislation.

Health records are made for each worker and updated after each health check. On request, individual workers may have access to their own personal health records.

Harmful effects and/or exceeding of limit values

In the event of exposure exceeding the limit values, a medical examination is automatically made available to the workers. If the limit values have been exceeded and/or the workers have suffered harmful effects to their health:

- the worker is informed by the doctor or qualified person of the results relating to him and any significant findings;
- the employer reviews the risk assessment and the measures taken, implements the measures recommended by the competent persons and establishes a continuous surveillance system.

Penalties

The Member States must provide for appropriate penalties if the national provisions adopted pursuant to the Directive have been infringed.

2.10. Exposure to carcinogens and mutagens

This Directive sets out the minimum requirements for protecting workers who have been exposed to carcinogens and mutagens. In order to reduce the risks associated with such exposure to workers' health and safety, it lays down exposure limit values as well as preventive measures.

ACT

Directive 2004/37/EC of the European Parliament and the Council of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (Sixth individual Directive within the meaning of Article 16(1) of Council Directive 89/391/EEC).

SUMMARY

This Directive does not apply to workers exposed only to the forms of radiation covered by the Treaty establishing the European Atomic Energy Community (Euratom Treaty). It applies to workers exposed to asbestos when its provisions are more favourable than those of Directive 83/477/EEC (as last amended by Directive 2003/18/EC).

Directive 89/391/EEC applies in full, without prejudice to more binding and/or more specific provisions contained in this Directive.

In the case of any activity likely to carry the risk of exposure to carcinogens or mutagens, the nature, degree and duration of workers' exposure must be determined on a regular basis in order to assess any risk to workers' health or safety and decide the steps to be taken. All routes of exposure must be taken into account, including absorption into and/or through the skin. Particular attention must be paid to workers who are especially at risk.

EMPLOYERS' OBLIGATIONS

Reduction and replacement

Employers must reduce the use of a carcinogen or mutagen, particularly by replacing it, as far as is technically possible, with a substance, preparation or process that is not dangerous or is less dangerous.

Prevention and reduction of exposure

Employers must ensure that the carcinogen or mutagen is manufactured and used in a closed system. If this is not technically possible, employers must ensure that the level of exposure is as low as is technically possible.

Exposure must not exceed the limits set out in Annex III.

Information for the competent authority

Employers must provide the competent authority, on request, with information relating to such matters as the reasons for using carcinogens or mutagens, the preventive measures taken and the number of workers exposed.

Unforeseeable exposure

In the event of unforeseeable incidents or accidents likely to lead to workers being abnormally exposed, employers must inform their workers. Protective clothing and

respiratory personal protective equipment must be worn, and exposure must be kept to the strict minimum necessary.

Foreseeable exposure

For certain activities, such as maintenance work, for which the likelihood of a significant increase in exposure is foreseeable and against which all preventive measures have been taken, employers must decide the measures necessary to reduce as far as possible the amount of time workers are exposed and to ensure that they are protected during these activities. Protective clothing and respiratory personal protective equipment must be worn, and exposure must be kept to the strict minimum necessary. Moreover, the areas used for such activities must be clearly demarked and indicated.

Access to risk areas

Employers must restrict access to risk areas to workers who, by virtue of their work or duties, are required to enter such areas.

Measures regarding hygiene and personal protection

Employers are required to take the following measures regarding hygiene and personal protection for all activities that carry a risk of contamination:

- ensure that workers do not eat, drink or smoke in work areas where there is a risk of contamination;
- supply workers with the appropriate clothes and provide separate storage places for work clothes and street clothes;
- provide washing and toilet facilities;
- properly store, check and clean protective equipment before and after every use.

Workers must not bear the cost of these measures.

Informing, training and consulting workers

Employers must take appropriate steps to ensure that workers and/or their representatives receive sufficient and suitable training about:

- potential and additional health risks (smoking);
- precautions for preventing exposure;
- hygiene requirements;
- protective clothing;
- measures to be taken in the event of an incident.

Employers must ensure that containers, packages and installations containing carcinogens or mutagens are clearly and legibly labelled, and that warning signs are clearly displayed.

Appropriate measures must be taken to ensure that workers are able to assess whether the Directive is being applied correctly. They must be informed as quickly as possible in the event of abnormal exposure.

Employers must have an updated list of workers undertaking activities that carry a risk to their health and safety in terms of exposure to carcinogens and mutagens.

Workers and/or their representatives must be consulted about and involved in all matters related to exposure to carcinogens and mutagens.

MISCELLANEOUS PROVISIONS

Health monitoring

Member States must take steps to ensure that the health of every exposed worker can be adequately monitored. These must be such that it is possible to apply individual and work-related health measures. When a worker's health is monitored, an individual medical file is to be created.

Practical recommendations relating to the monitoring of workers' health can be found in Annex II.

All cases of cancer identified as resulting from exposure at work must be notified to the competent authority.

Record-keeping

The up-to-date list of workers who have been exposed, which the employer is required to keep, and individual medical files are to be kept for at least 40 years after the end of exposure.

Limit values

The Council sets out in directives, where possible, limit values for all carcinogens or mutagens and, where necessary, other directly related provisions. Annex III contains the limit values for benzene, vinyl chloride monomer and hardwood dusts.

3. Use of personal protective equipment (PPE)

This Directive lays down minimum requirements for the assessment, selection and correct use of personal protective equipment. Priority must be given to collective safety measures.

ACT

Council Directive 89/656/EEC of 30 November 1989 on the minimum health and safety requirements for the use by workers of personal protective equipment at the workplace (third individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) [See amending acts].

SUMMARY

Definition of the term "personal protective equipment": equipment designed to be worn or held by the worker to protect him against hazards encountered at work. A number of items are excluded from the definition, such as equipment used by emergency and rescue services, self-defence or deterrent equipment.

Such equipment must be used when the existing risks cannot be sufficiently limited by technical means of collective protection or work organization procedures.

Employers' obligations



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Personal protective equipment must comply with the relevant Community provisions on design and manufacture with respect to safety and health (see Directive 89/686/EEC) and with the conditions set out in the Directive. The employer must provide the appropriate equipment free of charge and ensure that it is in good working order and hygienic condition.

Assessment of personal protective equipment

Before choosing personal protective equipment, the employer is required to assess the extent to which it complies with the conditions set out in the Directive. This includes analysis of risks which cannot be avoided by other means and definition and comparison of the requisite characteristics of the equipment.

Rules for use

Member States shall ensure that general rules are established for the use of personal protective equipment and/or covering cases and situations where the employer must provide such equipment. There must be prior consultation with employers' and workers' organisations. Annexes to the Directive contain information for establishing such rules: specimen risk survey table (I), non-exhaustive list of items of personal protective equipment (II), non-exhaustive list of activities which may require the provision of personal protective equipment (III).

Information, consultation and participation of workers

Workers shall be informed of all measures to be taken. Consultation and participation shall take place on the matters covered by the Directive.

Technical adjustments in the Annexes shall be adopted by the Commission assisted by a committee (Article 17, Directive 89/391/EEC).

4. Manual handling of loads involving risk

The object of this Directive is to ensure that workers are protected against the risks involved in the manual handling of heavy loads.

ACT

Council Directive 90/269/EEC of 29 May 1990 on the minimum health and safety requirements for the manual handling of loads where there is a risk particularly of back injury to workers (fourth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) [See amending acts].

SUMMARY

Definition of the term "manual handling of loads": any transporting or supporting of a load which, by reason of its characteristics or of unfavourable ergonomic conditions, involves a risk to workers.

In applying this Directive, employers must:

- use the appropriate means to avoid the need for manual handling of loads by workers, or, where this cannot be avoided, to take the appropriate organisational measures to reduce the risk involved, having regard to Annex I;
- ensure that workers receive adequate information on the weight of a load and the centre of gravity or the heaviest side when a package is eccentrically loaded, and to ensure proper training and precise information on how to handle loads correctly, and the risks involved in incorrect handling, having regard to Annexes I and II;
- guarantee that consultation and participation of workers takes place in accordance with the framework Directive on matters covered by this Directive.

The Annexes contain reference information on the characteristics of the load and the working environment, the physical effort required, the requirements of the activity and the individual risk factors. Technical alterations shall be adopted by the Commission assisted by a committee (Article 17, Directive 89/391/EEC).