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)

SECTION I

GENERAL PROVISIONS

Article 1

Aim and scope

1 This Directive, which is the 19th individual Directive within the meaning of Article 16(l) of Directive 89/391/EEC, lays down minimum requirements for the protection of workers from risks to their health and safety arising or likely to arise from exposure to artificial optical radiation during their work.

2 This Directive refers to the risk to the health and safety of workers due to adverse effects caused by exposure to artificial optical radiation to the eyes and to the skin.

3 Directive 89/391/EEC shall apply fully to the whole area referred to in paragraph 1, without prejudice to more stringent and/or more specific provisions contained in this Directive.

Article 2

Definitions

For the purposes of this Directive, the following definitions shall apply:

(a) optical radiation: any electromagnetic radiation in the wavelength range between 100 nm and 1 mm. The spectrum of optical radiation is divided into ultraviolet radiation, visible radiation and infrared radiation:

  (i) ultraviolet radiation: optical radiation of wavelength range between 100 nm and 400 nm. The ultraviolet region is divided into UVA (315-400 nm), UVB (280-315 nm) and UVC (100-280 nm);

  (ii) visible radiation: optical radiation of wavelength range between 380 nm and 780 nm;

  (iii) infrared radiation: optical radiation of wavelength range between 780 nm and 1 mm. The infrared region is divided into IRA (780-1 400 nm), IRB (1 400-3 000 nm) and IRC (3 000 nm-1 mm);

(b) laser (light amplification by stimulated emission of radiation): any device which can be made to produce or amplify electromagnetic radiation in the optical radiation wavelength range primarily by the process of controlled stimulated emission;

(c) laser radiation: optical radiation from a laser;

(d) non-coherent radiation: any optical radiation other than laser radiation;

(e) exposure limit values: limits on exposure to optical radiation which are based directly on established health effects and biological considerations. Compliance with these limits will ensure that workers exposed to artificial sources of optical radiation are protected against all known adverse health effects;

(f) irradiance (E) or power density: the radiant power incident per unit area upon a surface expressed in watts per square metre ($W\ m^{-2}$);

(g) radiant exposure (H): the time integral of the irradiance, expressed in joules per square metre ($J\ m^{-2}$);

(h) radiance (L): the radiant flux or power output per unit solid angle per unit area, expressed in watts per square metre per steradian ($W\ m^{-2}\ sr^{-1}$);

(i) level: the combination of irradiance, radiant exposure and radiance to which a worker is exposed.

Article 3

Exposure limit values

1 The exposure limit values for non-coherent radiation, other than that emitted by natural sources of optical radiation, are as set out in Annex I.

2 The exposure limit values for laser radiation are as set out in Annex II.

SECTION II

OBLIGATIONS OF EMPLOYERS

Article 4

Determination of exposure and assessment of risks

1 In carrying out the obligations laid down in Articles 6(3) and 9(1) of Directive 89/391/EEC, the employer, in the case of workers exposed to artificial sources of optical radiation, shall assess and, if necessary, measure and/or calculate the levels of exposure to optical radiation to which workers are likely to be exposed so that the measures needed to restrict exposure to the applicable limits can be identified and put into effect. The methodology applied in assessment, measurement and/or calculations shall follow the standards of the International Electrotechnical Commission (IEC) in respect of laser radiation and the recommendations of the International Commission on Illumination (CIE) and the European Committee for Standardisation (CEN) in respect of non-coherent radiation. In exposure situations which are not covered by these standards and recommendations, and until appropriate EU standards or recommendations become available, assessment, measurement and/or calculations shall be carried out using available national or international science-based guidelines. In both exposure situations, the assessment may take account of data provided by the manufacturers of the equipment when it is covered by relevant Community Directives.

2 The assessment, measurement and/or calculations referred to in paragraph 1 shall be planned and carried out by competent services or persons at suitable intervals, taking particular account of the provisions of Articles 7 and 11 of Directive 89/391/EEC concerning the necessary competent services or persons and the consultation and participation of workers.

The data obtained from the assessment, including those obtained from the measurement and/or calculation of the level of exposure referred to in paragraph 1 shall be preserved in a suitable form so as to permit their consultation at a later stage.

3 Pursuant to Article 6(3) of Directive 89/391/EEC, the employer shall give particular attention, when carrying out the risk assessment, to the following:

a the level, wavelength range and duration of exposure to artificial sources of optical radiation;

b the exposure limit values referred to in Article 3 of this Directive;

c any effects concerning the health and safety of workers belonging to particularly sensitive risk groups;

d any possible effects on workers' health and safety resulting from workplace interactions between optical radiation and photosensitising chemical substances;

e any indirect effects such as temporary blinding, explosion or fire;

f the existence of replacement equipment designed to reduce the levels of exposure to artificial optical radiation;

g appropriate information obtained from health surveillance, including published information, as far as possible;

h multiple sources of exposure to artificial optical radiation;

i a classification applied to a laser as defined in accordance with the relevant IEC standard and, in relation to any artificial source likely to cause damage similar to that of a laser of class 3B or 4, any similar classification;

j information provided by the manufacturers of optical radiation sources and associated work equipment in accordance with the relevant Community Directives.

4 The employer shall be in possession of an assessment of the risk in accordance with Article 9(1)(a) of Directive 89/391/EEC and shall identify which measures must be taken in accordance with Articles 5 and 6 of this Directive. The risk assessment shall be recorded on a suitable medium, according to national law and practice; it may include a justification by the employer that the nature and extent of the risks related to optical radiation make a further, detailed risk assessment unnecessary. The risk assessment shall be updated on a regular basis, particularly if there have been significant changes which could render it out of date, or if the results of health surveillance show it to be necessary.

Article 5

Provisions aimed at avoiding or reducing risks

1 Taking account of technical progress and of the availability of measures to control the risk at source, the risks arising from exposure to artificial optical radiation shall be eliminated or reduced to a minimum.

The reduction of risks arising from exposure to artificial optical radiation shall be based on the general principles of prevention set out in Directive 89/391/EEC.

2 Where the risk assessment carried out in accordance with Article 4(1) for workers exposed to artificial sources of optical radiation indicates any possibility that the exposure limit values may be exceeded, the employer shall devise and implement an action plan comprising technical and/or organisational measures designed to prevent the exposure exceeding the limit values, taking into account in particular:

a other working methods that reduce the risk from optical radiation;

b the choice of equipment emitting less optical radiation, taking account of the work to be done;

c technical measures to reduce the emission of optical radiation including, where necessary, the use of interlocks, shielding or similar health protection mechanisms;

d appropriate maintenance programmes for work equipment, workplaces and workstation systems;

e the design and layout of workplaces and workstations;

f limitation of the duration and level of the exposure;

g the availability of appropriate personal protective equipment;

h the instructions of the manufacturer of the equipment where it is covered by relevant Community Directives.

3 On the basis of the risk assessment carried out in accordance with Article 4, workplaces where workers could be exposed to levels of optical radiation from artificial sources exceeding the exposure limit values shall be indicated by appropriate signs in accordance with Council Directive 92/58/EEC of 24 June 1992 on the minimum requirements for the provision of safety and/or health signs at work (9th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC)[(1)]. The areas in question shall be identified, and access to them limited where this is technically possible and where there is a risk that the exposure limit values could be exceeded.

4 Workers shall not be exposed above the exposure limit values. In any event, if, despite the measures taken by the employer to comply with this Directive in respect of artificial sources of optical radiation, the exposure limit values are exceeded, the employer shall take immediate action to reduce exposure below the exposure limit values. The employer shall identify the reasons why the exposure limit values have been exceeded and shall adapt the protection and prevention measures accordingly in order to prevent them being exceeded again.

5 Pursuant to Article 15 of Directive 89/391/EEC, the employer shall adapt the measures referred to in this Article to the requirements of workers belonging to particularly sensitive risk groups.

Article 6

Worker information and training

Without prejudice to Articles 10 and 12 of Directive 89/391/EEC, the employer shall ensure that workers who are exposed to risks from artificial optical radiation at work and/or their representatives receive any necessary information and training relating to the outcome of the risk assessment provided for in Article 4 of this Directive, concerning in particular:

(a) measures taken to implement this Directive;

(b) the exposure limit values and the associated potential risks;

(c) the results of the assessment, measurement and/or calculations of the levels of exposure to artificial optical radiation carried out in accordance with Article 4 of this Directive together with an explanation of their significance and potential risks;

(d) how to detect adverse health effects of exposure and how to report them;

(e) the circumstances in which workers are entitled to health surveillance;

(f) safe working practices to minimise risks from exposure;

(g) proper use of appropriate personal protective equipment.

Article 7

Consultation and participation of workers

Consultation and participation of workers and/or of their representatives shall take place in accordance with Article 11 of Directive 89/391/EEC on the matters covered by this Directive.

SECTION III

MISCELLANEOUS PROVISIONS

Article 8

Health surveillance

1 With the objectives of the prevention and timely detection of any adverse health effects, as well as the prevention of any long-term health risks and any risk of chronic diseases, resulting from exposure to optical radiation, Member States shall adopt provisions to ensure appropriate health surveillance of workers pursuant to Article 14 of Directive 89/391/EEC.

2 Member States shall ensure that health surveillance is carried out by a doctor, an occupational health professional or a medical authority responsible for health surveillance in accordance with national law and practice.

3 Member States shall establish arrangements to ensure that, for each worker who undergoes health surveillance in accordance with paragraph 1, individual health records are made and kept up to date. Health records shall contain a summary of the results of the health surveillance carried out. They shall be kept in a suitable form so as to permit consultation at a later date, taking into account any confidentiality. Copies of the appropriate records shall be supplied to the competent authority on request, taking into account any confidentiality. The employer shall take appropriate measures to ensure that the doctor, the occupational health professional or the medical authority responsible for the health surveillance, as determined by Member States as appropriate, has access to the results of the risk assessment referred to in Article 4 where such results may be relevant to the health surveillance. Individual workers shall, at their request, have access to their own personal health records.

4 In any event, where exposure above the limit values is detected, a medical examination shall be made available to the worker(s) concerned in accordance with national law and practice. This medical examination shall also be carried out where, as a result of health surveillance, a worker is found to have an identifiable disease or adverse health effect which is considered by a doctor or occupational health professional to be the result of exposure to artificial optical radiation at work. In both cases, when limit values are exceeded or adverse health effects (including diseases) are identified:

a the worker shall be informed by the doctor or other suitably qualified person of the result which relates to him personally. He shall, in particular, receive information and advice regarding any health surveillance which he should undergo following the end of exposure;

b the employer shall be informed of any significant findings of the health surveillance, taking into account any medical confidentiality;

c the employer shall:

— review the risk assessment carried out pursuant to Article 4,

— review the measures provided for to eliminate or reduce risks pursuant to Article 5,

— take into account the advice of the occupational health professional or other suitably qualified person or the competent authority in implementing any measure required to eliminate or reduce risk in accordance with Article 5, and

— arrange continued health surveillance and provide for a review of the health status of any other worker who has been similarly exposed. In such cases, the competent doctor or occupational health professional or the competent authority may propose that the exposed persons undergo a medical examination.

Article 9

Penalties

Member States shall provide for adequate penalties to be applicable in the event of infringement of the national legislation adopted pursuant to this Directive. These penalties must be effective, proportionate and dissuasive.

[F1*Article 10*

Amendment of the Annexes

The Commission is empowered to adopt delegated acts in accordance with Article 10a to make strictly technical amendments to the Annexes, in order to take account of technical harmonisation and standardisation with regard to the design, building, manufacture or construction of work equipment or workplaces, technical progress, changes in harmonised European standards or international specifications and new scientific findings concerning occupational exposure to optical radiation. Those amendments shall not result in a modification of the exposure limit values set out in the Annexes.

Where, in duly justified and exceptional cases involving imminent, direct and serious risks to workers' and other persons' physical health and safety, imperative grounds of urgency require action in a very short timeframe, the procedure provided for in Article 10b shall apply to delegated acts adopted pursuant to this Article.**]**

Textual Amendments

F1 Substituted by Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (Text with EEA relevance).

[F2 Article 10a

Exercise of the delegation

1 The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2 The power to adopt delegated acts referred to in Article 10 shall be conferred on the Commission for a period of five years from 26 July 2019. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.

3 The delegation of power referred to in Article 10 may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

4 Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making[(2)].

5 As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

6 A delegated act adopted pursuant to Article 10 shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Textual Amendments

F2 Inserted by Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (Text with EEA relevance).

Article 10b

Urgency procedure

1 Delegated acts adopted under this Article shall enter into force without delay and shall apply as long as no objection is expressed in accordance with paragraph 2. The notification of a delegated act to the European Parliament and the Council shall state the reasons for the use of the urgency procedure.

2 Either the European Parliament or the Council may object to a delegated act in accordance with the procedure referred to in Article 10a(6). In such a case, the Commission shall

repeal the act immediately following the notification of the decision to object by the European Parliament or by the Council.**]**

Textual Amendments

F2 Inserted by Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (Text with EEA relevance).

[F3 Article 11

[[F3 Committee]

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Textual Amendments

F3 Deleted by Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (Text with EEA relevance).

SECTION IV

FINAL PROVISIONS

[F4 Article 12

[[F4 Reports]

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Textual Amendments

F4 Deleted by Directive 2007/30/EC of the European Parliament and of the Council of 20 June 2007 amending Council Directive 89/391/EEC, its individual Directives and Council Directives 83/477/EEC, 91/383/EEC, 92/29/EEC and 94/33/EC with a view to simplifying and rationalising the reports on practical implementation (Text with EEA relevance).

Article 13

Practical guide

In order to facilitate implementation of this Directive the Commission shall draw up a practical guide to the provisions of Articles 4 and 5 and Annexes I and II.

Article 14

Transposition

1 Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 27 April 2010. They shall forthwith inform the Commission thereof.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2 Member States shall communicate to the Commission the text of the provisions of national law which they adopt or have already adopted in the field covered by this Directive.

[*F5**Article 14a*

1 Without prejudice to the general principles of protection and prevention in the area of health and safety of workers, France may, until 31 December 2017, derogate from the application of the provisions necessary to comply with this Directive in Mayotte as an outermost region within the meaning of Article 349 of the Treaty on the Functioning of the European Union (hereinafter 'Mayotte'), provided that such application requires specific technical facilities that are not available in Mayotte.

The first subparagraph does not apply to the obligations set out in Article 5(1) of this Directive, or to the provisions of this Directive which reflect the general principles laid down in Directive 89/391/EEC.

2 All derogations from this Directive resulting from the application of measures existing on 1 January 2014 or from the adoption of new measures shall be preceded by a consultation with the social partners in accordance with national law and practice. Such derogations shall be applied under conditions which, taking into account the particular circumstances prevailing in Mayotte, guarantee that the resulting risks for workers are reduced to a minimum and that the workers concerned benefit from reinforced health surveillance.

3 The national derogating measures shall be reviewed every year, after consultation with the social partners, and shall be withdrawn as soon as the circumstances justifying them no longer subsist.**]**

Textual Amendments

F5 Inserted by Council Directive 2013/64/EU of 17 December 2013 amending Council Directives 91/271/EEC and 1999/74/EC, and Directives 2000/60/EC, 2006/7/EC, 2006/25/EC and 2011/24/EU of the European Parliament and of the Council, following the amendment of the status of Mayotte with regard to the European Union.

Article 15

Entry into force

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Union*.

Article 16

Addressees

This Directive is addressed to the Member States.

(**1**) OJ L 245, 26.8.1992, p. 23.

(**2**) **[**[F2]OJ L 123, 12.5.2016, p. 1.**]**

Textual Amendments

F2 Inserted by Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (Text with EEA relevance).