

**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)**

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 137(2) thereof,

Having regard to the proposal from the Commission <sup>(1)</sup>, submitted after consultation with the Advisory Committee on Safety, Hygiene and Health Protection at Work,

Having regard to the opinion of the Economic and Social Committee <sup>(2)</sup>,

Having consulted the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty <sup>(3)</sup>, in the light of the joint text approved by the Conciliation Committee on 8 November 2002,

Whereas:

(1) Under the Treaty, the Council may adopt, by means of directives, minimum requirements for encouraging improvements, especially in the working environment, to guarantee a better level of protection of the health and safety of workers. Such directives are to avoid imposing administrative, financial and legal constraints in a way which would hold back the creation and development of small and medium-sized undertakings.

(2) While, in accordance with the Treaty, this Directive does not prevent any Member State from maintaining or introducing more stringent protective measures, its implementation should not serve to justify any regression in relation to the situation which already prevails in each Member State.

(3) Council Directive 86/188/EEC of 12 May 1986 on the protection of workers from the risks related to exposure to noise at work <sup>(4)</sup> made provision for its re-examination by the Council on a proposal from the Commission and with a view to reducing the risks concerned, taking into account in particular progress made in scientific knowledge and technology.

(4) The communication from the Commission on its programme concerning safety, hygiene and health at work <sup>(5)</sup> provides for the adoption of measures to promote safety at work, particularly with a view to extending the scope of Directive 86/188/EEC and the re-evaluation of the threshold values. The Council, in its resolution of 21 December 1987 on safety, hygiene and health at work <sup>(6)</sup>, took note of this.

(5) The communication from the Commission concerning its action programme relating to the implementation of the Community Charter of the Fundamental Social Rights of Workers provides for the introduction of minimum health and safety requirements regarding the exposure of workers to the risks caused by physical agents. In September 1990 the European Parliament adopted a resolution concerning this action programme <sup>(7)</sup>, inviting the Commission in particular to draw up a specific directive on the risks caused by noise and vibration and by any other physical agent at the workplace.

(6) As a first step, the European Parliament and the Council adopted on 25 June 2002 Directive 2002/44/EC 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) <sup>(8)</sup>.

(7) As a second step, it is considered appropriate to introduce measures protecting workers from the risks arising from noise owing to its effects on the health and safety of workers, in particular damage to hearing. These measures are intended not only to ensure the health and safety of each worker on an individual basis, but also to create a minimum basis of protection for all Community workers in order to avoid possible distortions of competition.

(8) Current scientific knowledge of the effects which exposure to noise may have on health and safety is not sufficient to enable precise exposure levels covering all risks to health and safety, especially as regards the effects of noise other than those of an auditory nature, to be set.

<sup>(1)</sup> OJ C 77, 18.3.1993, p. 12 and OJ C 230, 19.8.1994, p. 3.

<sup>(2)</sup> OJ C 249, 13.9.1993, p. 28.

<sup>(3)</sup> Opinion of the European Parliament of 20 April 1994 (OJ C 128, 9.5.1994, p. 146), confirmed on 16 September 1999 (OJ C 54, 25.2.2000, p. 75), Council Common Position of 29 October 2001 (OJ C E 45, 19.2.2002, p. 41) and decision of the European Parliament of 13 March 2002 (not yet published in the Official Journal).

<sup>(4)</sup> OJ L 137, 24.5.1986, p. 28. Directive as amended by Directive 98/24/EC (OJ L 131, 5.5.1998, p. 11).

<sup>(5)</sup> OJ C 28, 3.2.1988, p. 3.

<sup>(6)</sup> OJ C 28, 3.2.1988, p. 1.

<sup>(7)</sup> OJ C 260, 15.10.1990, p. 167.

<sup>(8)</sup> OJ L 177, 6.7.2002, p. 13.

- (9) A system of protection against noise must limit itself to a definition, free of excessive detail, of the objectives to be attained, the principles to be observed and the fundamental values to be used, in order to enable Member States to apply the minimum requirements in an equivalent manner.
- (10) The level of exposure to noise can be more effectively reduced by incorporating preventive measures into the design of work stations and places of work and by selecting work equipment, procedures and methods so as to give priority to reducing the risks at source. Provisions relating to work equipment and methods thus contribute to the protection of the workers involved. In accordance with the general principles of prevention as laid down in Article 6(2) of 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 <sup>(1)</sup>, collective protection measures have priority over individual protection measures.
- (11) The Code on noise levels on board ships of the International Maritime Organisation Resolution A 468(12) provides guidance for achieving a reduction of noise at source on board ships. Member States should be entitled to provide for a transitional period with regard to the personnel on board seagoing vessels.
- (12) In order to correctly assess the exposure of workers to noise it is useful to apply an objective measuring method, and thus references to the generally recognised standard ISO 1999:1990 are made. The assessed or objectively measured values should be decisive for initiating the actions envisaged at the lower and upper exposure action values. Exposure limit values are needed to avoid irreversible damage to workers' hearing; the noise reaching the ear should be kept below the exposure limit values.
- (13) The particular characteristics of the music and entertainment sectors require practical guidance to allow for an effective application of the provisions laid down by this Directive. Member States should be entitled to make use of a transitional period for the development of a code of conduct providing for practical guidelines which would help workers and employers in those sectors to attain the levels of protection established in this Directive.
- (14) Employers should make adjustments in the light of technical progress and scientific knowledge regarding risks related to exposure to noise, with a view to improving the health and safety protection of workers.
- (15) Since this Directive is an individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC, that Directive applies to the exposure of workers to noise, without prejudice to more stringent and/or specific provisions contained in this Directive.
- (16) This Directive constitutes a practical step towards creating the social dimension of the internal market.
- (17) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission <sup>(2)</sup>,

HAVE ADOPTED THIS DIRECTIVE:

#### SECTION I

#### GENERAL PROVISIONS

##### Article 1

#### Aim and scope

1. This Directive, which is the 17th individual Directive within the meaning of Article 16(1) 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 noise and in particular the risk to hearing.
2. The requirements of this Directive shall apply to activities in which workers are or are likely to be exposed to risks from noise as a result of their work.
3. Directive 89/391/EEC shall apply fully to the whole area referred to in paragraph 1, without prejudice to more stringent and/or specific provisions contained in this Directive.

##### Article 2

#### Definitions

For the purposes of this Directive, the physical parameters used as risk predictors are defined as follows:

- (a) peak sound pressure ( $p_{\text{peak}}$ ): maximum value of the 'C'-frequency weighted instantaneous noise pressure;

<sup>(1)</sup> OJ L 183, 29.6.1989, p. 1.

<sup>(2)</sup> OJ L 184, 17.7.1999, p. 23.

- (b) daily noise exposure level ( $L_{EX,8h}$ ) (dB(A) re. 20  $\mu$ Pa): time-weighted average of the noise exposure levels for a nominal eight-hour working day as defined by international standard ISO 1999: 1990, point 3.6. It covers all noises present at work, including impulsive noise;
- (c) weekly noise exposure level ( $L_{EX,8h}$ ): time-weighted average of the daily noise exposure levels for a nominal week of five eight-hour working days as defined by international standard ISO 1999:1990, point 3.6 (note 2).

### Article 3

#### Exposure limit values and exposure action values

1. For the purposes of this Directive the exposure limit values and exposure action values in respect of the daily noise exposure levels and peak sound pressure are fixed at:

- (a) exposure limit values:  $L_{EX,8h} = 87$  dB(A) and  $p_{peak} = 200$  Pa <sup>(1)</sup> respectively;
- (b) upper exposure action values:  $L_{EX,8h} = 85$  dB(A) and  $p_{peak} = 140$  Pa <sup>(2)</sup> respectively;
- (c) lower exposure action values:  $L_{EX,8h} = 80$  dB(A) and  $p_{peak} = 112$  Pa <sup>(3)</sup> respectively.

2. When applying the exposure limit values, the determination of the worker's effective exposure shall take account of the attenuation provided by the individual hearing protectors worn by the worker. The exposure action values shall not take account of the effect of any such protectors.

3. In duly justified circumstances, for activities where daily noise exposure varies markedly from one working day to the next, Member States may, for the purposes of applying the exposure limit values and the exposure action values, use the weekly noise exposure level in place of the daily noise exposure level to assess the levels of noise to which workers are exposed, on condition that:

- (a) the weekly noise exposure level as shown by adequate monitoring does not exceed the exposure limit value of 87 dB(A); and
- (b) appropriate measures are taken in order to reduce the risk associated with these activities to a minimum.

### SECTION II

#### OBLIGATIONS OF EMPLOYERS

### Article 4

#### Determination 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 shall assess and, if necessary, measure the levels of noise to which workers are exposed.

<sup>(1)</sup> 140 dB (C) in relation to 20  $\mu$ Pa.  
<sup>(2)</sup> 137 dB (C) in relation to 20  $\mu$ Pa.  
<sup>(3)</sup> 135 dB (C) in relation to 20  $\mu$ Pa.

2. The methods and apparatus used shall be adapted to the prevailing conditions particularly in the light of the characteristics of the noise to be measured, the length of exposure, ambient factors and the characteristics of the measuring apparatus.

These methods and this apparatus shall make it possible to determine the parameters defined in Article 2 and to decide whether, in a given case, the values fixed in Article 3 have been exceeded.

3. The methods used may include sampling, which shall be representative of the personal exposure of a worker.

4. The assessment and measurement referred to in paragraph 1 shall be planned and carried out by competent services at suitable intervals, taking particular account of the provisions of Article 7 of Directive 89/391/EEC concerning the necessary competent services or persons. The data obtained from the assessment and/or measurement of the level of exposure to noise shall be preserved in a suitable form so as to permit consultation at a later stage.

5. When applying this Article, the assessment of the measurement results shall take into account the measurement inaccuracies determined in accordance with metrological practice.

6. 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, type and duration of exposure, including any exposure to impulsive noise;
- (b) the exposure limit values and the exposure action values laid down in Article 3 of this Directive;
- (c) any effects concerning the health and safety of workers belonging to particularly sensitive risk groups;
- (d) 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;
- (e) any indirect effects on workers' health and safety resulting from interactions between noise and warning signals or other sounds that need to be observed in order to reduce the risk of accidents;
- (f) information on noise emission provided by manufacturers of work equipment in accordance with the relevant Community directives;
- (g) the existence of alternative work equipment designed to reduce the noise emission;
- (h) the extension of exposure to noise beyond normal working hours under the employer's responsibility;

- (i) appropriate information obtained following health surveillance, including published information, as far as possible;
- (j) the availability of hearing protectors with adequate attenuation characteristics.

7. 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, 6, 7 and 8 of this Directive. The risk assessment shall be recorded on a suitable medium, according to national law and practice. The risk assessment shall be kept up to date on a regular basis, particularly if there have been significant changes which could render it out of date, or when the results of health surveillance show it to be necessary.

#### Article 5

##### Provisions aimed at avoiding or reducing exposure

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

The reduction of such risks shall be based on the general principles of prevention set out in Article 6(2) of Directive 89/391/EEC, and take into account in particular:

- (a) other working methods that require less exposure to noise;
- (b) the choice of appropriate work equipment, taking account of the work to be done, emitting the least possible noise, including the possibility of making available to workers work equipment subject to Community provisions with the aim or effect of limiting exposure to noise;
- (c) the design and layout of workplaces and work stations;
- (d) adequate information and training to instruct workers to use work equipment correctly in order to reduce their exposure to noise to a minimum;
- (e) noise reduction by technical means:
  - (i) reducing airborne noise, e.g. by shields, enclosures, sound-absorbent coverings;
  - (ii) reducing structure-borne noise, e.g. by damping or isolation;
- (f) appropriate maintenance programmes for work equipment, the workplace and workplace systems;
- (g) organisation of work to reduce noise:
  - (i) limitation of the duration and intensity of the exposure;
  - (ii) appropriate work schedules with adequate rest periods.

2. On the basis of the risk assessment referred to in Article 4, if the upper exposure action values are exceeded, the employer shall establish and implement a programme of technical and/or organisational measures intended to reduce the exposure to noise, taking into account in particular the measures referred to in paragraph 1.

3. On the basis of the risk assessment referred to in Article 4, workplaces where workers are likely to be exposed to noise exceeding the upper exposure action values shall be marked with appropriate signs. The areas in question shall also be delimited and access to them restricted where this is technically feasible and the risk of exposure so justifies.

4. 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 shall be reduced to a level compatible with their purpose and the conditions of use.

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

##### Personal protection

1. If the risks arising from exposure to noise cannot be prevented by other means, appropriate, properly fitting individual hearing protectors shall be made available to workers and used by them in accordance with the provisions of 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) <sup>(1)</sup> and Article 13(2) of Directive 89/391/EEC and under the conditions set out below:

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

2. The employer shall make every effort to ensure the wearing of hearing protectors and shall be responsible for checking the effectiveness of the measures taken in compliance with this Article.

<sup>(1)</sup> OJ L 393, 30.12.1989, p. 18.



*Article 7***Limitation of exposure**

1. Under no circumstances shall the exposure of the worker as determined in accordance with Article 3(2) exceed the exposure limit values.
2. If, despite the measures taken to implement this Directive, exposures above the exposure limit values are detected, the employer shall:
  - (a) take immediate action to reduce the exposure to below the exposure limit values;
  - (b) identify the reasons why overexposure has occurred; and
  - (c) amend the protection and prevention measures in order to avoid any recurrence.

*Article 8***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 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:

- (a) the nature of such risks;
- (b) 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;
- (c) the exposure limit values and the exposure action values laid down in Article 3 of this Directive;
- (d) the results of the assessment and measurement of the noise carried out in accordance with Article 4 of this Directive together with an explanation of their significance and potential risks;
- (e) the correct use of hearing protectors;
- (f) why and how to detect and report signs of hearing damage;
- (g) the circumstances in which workers are entitled to health surveillance and the purpose of health surveillance, in accordance with Article 10 of this Directive;
- (h) safe working practices to minimise exposure to noise.

*Article 9***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, in particular:

- the assessment of risks and identification of measures to be taken, referred to in Article 4,
- the actions aimed at eliminating or reducing risks arising from exposure to noise, referred to in Article 5,
- the choice of individual hearing protectors referred to in Article 6(1)(c).

## SECTION III

**MISCELLANEOUS PROVISIONS***Article 10***Health surveillance**

1. Without prejudice to Article 14 of Directive 89/391/EEC, Member States shall adopt provisions to ensure the appropriate health surveillance of workers where the results of the assessment and measurement provided for in Article 4(1) of this Directive indicate a risk to their health. Those provisions, including the requirements specified for health records and their availability, shall be introduced in accordance with national law and/or practice.

2. A worker whose exposure exceeds the upper exposure action values shall have the right to have his/her hearing checked by a doctor or by another suitably qualified person under the responsibility of a doctor, in accordance with national law and/or practice. Preventive audiometric testing shall also be available for workers whose exposure exceeds the lower exposure action values, where the assessment and measurement provided for in Article 4(1) indicate a risk to health.

The objectives of these checks are to provide early diagnosis of any loss of hearing due to noise, and to preserve the hearing function.

3. Member States shall establish arrangements to ensure that, for each worker who undergoes surveillance in accordance with paragraphs 1 and 2, 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 any consultation at a later date, taking into account any confidentiality.

Copies of the appropriate records shall be supplied to the competent authority on request. The individual worker shall, at his or her request, have access to the health records relating to him or her personally.

4. Where, as a result of surveillance of the hearing function, a worker is found to have identifiable hearing damage, a doctor, or a specialist if the doctor considers it necessary, shall assess whether the damage is likely to be the result of exposure to noise at work. If this is the case:

- (a) the worker shall be informed by the doctor or other suitably qualified person of the result which relates to him or her personally;
- (b) the employer shall:
  - (i) review the risk assessment carried out pursuant to Article 4;
  - (ii) review the measures provided for to eliminate or reduce risks pursuant to Articles 5 and 6;
  - (iii) take into account the advice of the occupational healthcare professional or other suitably qualified person or the competent authority in implementing any measures required to eliminate or reduce risk in accordance with Articles 5 and 6, including the possibility of assigning the worker to alternative work where there is no risk of further exposure; and
  - (iv) arrange systematic health surveillance and provide for a review of the health status of any other worker who has been similarly exposed.

#### Article 11

#### Derogations

1. In exceptional situations where, because of the nature of the work, the full and proper use of individual hearing protectors would be likely to cause greater risk to health or safety than not using such protectors, Member States may grant derogations from the provisions of Articles 6(1)(a) and (b) and 7.

2. The derogations referred to in paragraph 1 shall be granted by Member States following consultation with both sides of industry and, where appropriate, with the medical authorities responsible, in accordance with national laws and/or practice. Such derogations must be accompanied by conditions which guarantee, taking into account the special circumstances, that the resulting risks are reduced to a minimum and that the workers concerned are subject to increased health surveillance. Such derogations shall be reviewed every four years and withdrawn as soon as the justifying circumstances no longer obtain.

3. Every four years Member States shall forward to the Commission a list of derogations referred to in paragraph 1, indicating the exact reasons and circumstances which made them decide to grant the derogations.

#### Article 12

#### Technical amendments

Amendments of a strictly technical nature shall be adopted in accordance with the regulatory procedure laid down in Article 13(2) and in line with:

- (a) the adoption of directives in the field of technical harmonisation and standardisation with regard to the design, building, manufacture or construction of work equipment and/or workplaces; and
- (b) technical progress, changes in the most appropriate harmonised European standards or specifications and new findings concerning noise.

#### Article 13

#### Committee

1. The Commission shall be assisted by the Committee referred to in Article 17 of Directive 89/391/EEC.

2. Where reference is made to this paragraph, Articles 5 and 7 of Council Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

3. The Committee shall adopt its Rules of Procedure.

#### Article 14

#### Code of conduct

In the context of the application of this directive Member States shall draw up in consultation with the social partners, in accordance with national law and practice, a code of conduct providing for practical guidelines to help workers and employers in the music and entertainment sectors to meet their legal obligations as laid down in this Directive.

#### Article 15

#### Repeal

Directive 86/188/EEC is hereby repealed with effect from the date set out in the first subparagraph of Article 17(1).

## SECTION IV

## FINAL PROVISIONS

## Article 16

**Reports**

Every five years Member States shall provide a report to the Commission on the practical implementation of this Directive, indicating the points of view of both sides of industry. It shall contain a description of best practice for preventing noise with a harmful effect on health and of other forms of work organisation, together with the action taken by the Member States to impart knowledge of such best practice.

On the basis of those reports, the Commission shall carry out an overall assessment of the implementation of this Directive, including implementation in the light of research and scientific information, and, *inter alia*, taking into account the implications of this Directive for the music and entertainment sectors. The Commission shall inform the European Parliament, the Council, the European Economic and Social Committee and the Advisory Committee on Safety, Hygiene and Health Protection at Work thereof and, if necessary, propose amendments.

## Article 17

**Transposition**

1. The Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 15 February 2006. 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 the Member States.

2. In order to take account of particular conditions, Member States may, if necessary, have an additional period of five years from 15 February 2006, that is to say a total of eight years, to implement the provisions of Article 7 with regard to the personnel on board seagoing vessels.

In order to allow for the drawing up of a code of conduct providing for practical guidelines for the implementation of the provisions of this Directive, Member States shall be entitled to make use of a maximum transitional period of two years from 15 February 2006, that is to say a total of five years from the entry into force of this Directive, to comply with this Directive, with regard to the music and entertainment sectors on the condition that during this period the levels of protection already achieved in individual Member States, with regard to the personnel in these sectors, are maintained.

3. The 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.

## Article 18

**Entry into force**

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

## Article 19

**Addressees**

This Directive is addressed to the Member States.

Done at Brussels, 6 February 2003.

*For the European Parliament*

*The President*

P. COX

*For the Council*

*The President*

G. EFTHYMIU