

THE GOVERNMENT OF ROMANIA

DECISION no. 1876/2005 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from vibration

On the basis of Article 108 in the Romanian Constitution, republished,

The Government of Romania has adopted this decision:

CHAPTER 1 GENERAL PROVISIONS

Section 1 Aim and scope

Art.1 - This decision lays down minimum requirements for the protection of workers from risks to their health and safety arising or likely to arise from exposure to mechanical vibration.

Art.2 - The provisions of this decision shall apply to activities in which workers are or are likely to be exposed to risks arising from mechanical vibration during their work.

Art.3 - The provisions of the national legislation transposing the Directive 89/391/EEC shall apply fully to the whole area referred to in Article 2, without prejudice to more stringent and/or more specific provisions contained in this decision.

Art.4 - For the purposes of this decision, the following terms shall mean:

- a) *hand-arm vibration* - the mechanical vibration that, when transmitted to the human hand-arm system, entails risks to the health and safety of workers, in particular vascular, bone or joint, neurological or muscular disorders;
- b) *whole-body vibration* - the mechanical vibration that, when transmitted to the whole body, entails risks to the health and safety of workers, in particular lower-back morbidity and trauma of the spine.

Section 2 Exposure limit values and action values

Art.5 - (1) For hand-arm vibration:

- a) the daily occupational exposure limit value standardised to an eight-hour reference period shall be 5 m/s^2 ;
- b) the daily exposure action value standardised to an eight-hour reference period shall be $2,5 \text{ m/s}^2$.

(2) Workers' exposure to hand-arm vibration shall be assessed or measured on the basis of the provisions of Point 1 of Part A of the Annex, which is an integrated part of this decision.

Art.6 - (1) For whole-body vibration:

- a) the daily occupational exposure limit value standardised to an eight-hour reference period shall be $1,15 \text{ m/s}^2$ or a vibration dose value of $21 \text{ m/s}^{1,75}$;

b) the daily exposure action value standardised to an eight-hour reference period shall be 0,5 m/s² or a vibration dose value of 9,1 m/s^{1,75}.

(2) Workers' exposure to whole-body vibration shall be assessed or measured on the basis of the provisions of Point 1 of Part B of the Annex.

CHAPTER 2 OBLIGATION OF EMPLOYERS

Section 1 Determination and assessment of risks

Art.7 - (1) In carrying out the obligations laid down in national legislation transposing the Directive 89/391/EEC, the employer shall assess and, if necessary, measure the levels of mechanical vibration to which workers are exposed.

(2) Measurement shall be carried out in accordance with Point 2 of Part A or Point 2 of Part B of the Annex, as appropriate.

Art.8 - (1) The level of exposure to mechanical vibration may be assessed by means of observation of specific working practices and reference to relevant information on the probable magnitude of the vibration corresponding to the equipment or the types of equipment used in the particular conditions of use, including such information provided by the manufacturer of the equipment.

(2) The operation referred to in paragraph (1) shall be distinguished from measurement, which requires the use of specific apparatus and appropriate methodology.

Art.9 - (1) The assessment and measurement referred to in Article 7 shall be planned and carried out by competent services at suitable intervals, taking particular account of the provisions of national legislation which transposing the provisions of Directive 89/391/EEC concerning the necessary competent services for protection and prevention or designated workers responsible with health and safety at work.

(2) The data obtained from the assessment and/or measurement of the level of exposure to mechanical vibration shall be preserved in a suitable form so as to permit consultation at a later stage.

Art.10 - When carrying out the risk assessment, the employer shall give particular attention to the following:

- a) the level, type and duration of exposure, including any exposure to intermittent vibration or repeated shocks;
- b) the exposure limit values and the exposure action values laid down in Article 5 and 6;
- c) any effects concerning the health and safety of workers exposed at particularly sensitive risk;
- d) any indirect effects on worker safety resulting from interactions between mechanical vibration and the workplace or other work equipment;
- e) information provided by the manufacturers of work equipment in accordance with the relevant legislation in force.
- f) the existence of similar equipment designed to reduce the levels of exposure to mechanical vibration;
- g) the extension of exposure to whole-body vibration beyond normal working hours under the employer's responsibility;
- h) specific working conditions such as low temperatures;

i) appropriate information obtained from health surveillance, including published information, as far as possible.

Art.11 -(1) The employer shall be in possession of an assessment of the risk in accordance with the provisions of the national legislation transposing the Directive 89/391/EEC and shall identify which measures must be taken in accordance with the sections 2 and 3 of this chapter.

(2) The risk assessment shall be recorded on a suitable medium and must include a justification by the employer that the nature and extent of the risks related to mechanical vibration make a further detailed risk assessment unnecessary.

(3) The risk assessment shall be kept up-to-date on a regular basis, particularly if there have been significant changes, or when the results of health surveillance show it to be necessary.

SECTION 2

Avoid or reduce exposure

Art.12 -(1) The risks arising from exposure to mechanical vibration shall be eliminated at their source or reduced to a minimum, taking account of technical progress and availability of measures to reduce the risk at source.

(2) The reduction of such risks shall be based on the general principles of prevention set out in national legislation transposing Directive 89/391/EEC.

Art.13 - On the basis of the risk assessment referred to in section 1 of this chapter, once the exposure action values laid down in Article 5 paragraph (1) letter (b) and Article 6 paragraph (1) letter (b) are exceeded, the employer shall establish and implement a programme of technical and/or organisational measures intended to reduce to a minimum exposure to mechanical vibration and the attendant risks, taking into account in particular:

- a) other working methods that require less exposure to mechanical vibration;
- b) the choice of appropriate work equipment of appropriate ergonomic design and, taking account of the work to be done, producing the least possible vibration;
- c) the provision of auxiliary equipment that reduces the risk of injuries caused by vibration, such as seats that effectively reduce whole-body vibration and handles which reduce the vibration transmitted to the hand-arm system;
- d) appropriate maintenance programmes for work equipment, the workplace and workplace systems;
- e) the design and layout of workplaces and work stations;
- f) adequate information and training to instruct workers to use work equipment correctly and safely in order to reduce their exposure to mechanical vibration to a minimum;
- g) limitation of the duration and intensity of the exposure;
- h) appropriate work schedules with adequate rest periods;
- i) the provision of clothing to protect exposed workers from cold and damp.

Art.14 - In any event, the workers shall not be exposed above the exposure limit value.

Art.15 - (1) If, despite the measures taken by the employer to comply with this decision, the exposure limit value is exceeded, the employer shall take immediate action to reduce exposure below the exposure limit value.

(2) The employer shall identify the reasons why the exposure limit value has been exceeded, and shall amend the protection and prevention measures accordingly in order to prevent it being exceeded again.

Art.16 - Pursuant to the provisions of the national legislation transposing Directive 89/391/EEC, the employer shall adapt the measures referred to in this section to the requirements of workers at particular risk.

SECTION 3 Worker information and training

Art.17 - (1) Without prejudice to the provisions of the national legislation transposing Directive 89/391/EEC, the employer shall ensure that workers who are exposed to the risks from mechanical vibration at work and/or their representatives receive information relating to the outcome of the risk assessment provided for in Article 7 and an adequate training.

(2) The information and training provided for in paragraph (1) shall refer in particular:

- a) the measures taken to implement this decision in order to eliminate or reduce to a minimum the risks from mechanical vibration;
- b) the exposure limit values and the exposure action values;
- c) the results of the assessment and measurement of the mechanical vibration carried out in accordance with section 1;
- d) the potential injury arising from the work equipment in use;
- e) why and how to detect and report signs of injury;
- f) the circumstances in which workers are entitled to health surveillance;
- g) safe working practices to minimise exposure to mechanical vibration.

SECTION 4 Consultation and participation of workers

Art.18 - Consultation and participation of workers and/or their representatives shall take place in accordance with the national legislation transposing the Directive 89/391/EEC on the matters covered by this decision.

CHAPTER III HEALTH SURVEILLANCE

Art.19 - (1) Without prejudice to the provisions of the national legislation transposing the Directive 89/391/EEC, the Ministry of Health shall adopt provisions to ensure the appropriate health surveillance of workers with reference to the outcome of the risk assessment provided for in Article 7 where it indicates a risk to their health.

(2) Those provisions, including the requirements specified for health records and their availability shall be introduced in accordance with the regulations in force.

Art.20 - (1) Health surveillance shall be intended to prevent and diagnose rapidly any disorder linked with exposure to mechanical vibration.

(2) The results of the health surveillance must be taken into account in the application of preventive measures at a specific workplace.

Art.21 - Such appropriate surveillance shall be ensured where:

- a) the exposure of workers to vibration is such that a link can be established between that exposure and an identifiable illness or harmful effects on health;
- b) it is probable that the illness or the effects occur in a worker's particular working conditions;
- c) there are tested techniques for the detection of the illness or the harmful effects on health.

Art.22 - In any event, workers exposed to mechanical vibration in excess of the values stated in Article 5 paragraph (1) letter b) and Article 6 paragraph (1) letter b) shall be entitled to appropriate health surveillance.

Art.23 - (1) For each worker who undergoes health surveillance in accordance with Articles 19-22, individual health records shall be made.

(2) - The occupational medicine physician shall keep up-to-date the individual health records provided in paragraph (1).

(3) The individual health records provided for in paragraph (1) shall contain a summary of the results of the health surveillance carried out.

(4) The individual health records provided for in paragraph (1) shall be kept in a suitable form so as to permit any consultation at a later date, taking into account the regulatory provisions in force on confidentiality.

(5) Copies of the appropriate records provided for in paragraph (1) shall be supplied to the territorial public health directorates on request.

(6) The individual worker shall, at his request, have access to the health records relating to him personally.

Art.24 - 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 an occupational medicine physician to be the result of exposure to mechanical vibration at work, the worker shall:

a) be informed by the doctor or occupational medicine physician of the result which relates to him personally;

b) receive information and advice regarding any health surveillance which he should undergo following the end of exposure.

Art.25 - (1) 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 an occupational medicine physician to be the result of exposure to mechanical vibration at work, the employer shall:

a) be informed of any significant findings from the health surveillance, taking into account any medical confidentiality;

b) review the risk assessment carried out pursuant to section 1, chapter II;

c) review the measures provided for to eliminate or reduce risks pursuant to section 2, chapter II;

d) take into account the advice of the occupational medicine physician or territorial public health directorates in implementing any measures required to eliminate or reduce risk in accordance with section 2, chapter II, including the possibility of assigning the worker to alternative work where there is no risk of further exposure;

e) arrange continued health surveillance and provide for a review of the health status of any other worker who has been similarly exposed.

(2) In the situation provided for in paragraph (1) letter e), the occupational medicine physician or territorial public health directorates may propose that exposed persons undergo a medical examination.

CHAPTER IV FINAL PROVISIONS

Art.26 - (1) The work equipment which was given to workers before 1st July 2007 and which does not permit the vibration exposure limit values to be respected, taking into account the latest technical advances and/or the organisational measures taken, may be used until 1st July 2010.
(2) Is exempted from the provisions of paragraph (1) the work equipment used in the agriculture and forestry sectors which may be used until 1st July 2014.

Art.27 - In compliance with the general principles of health and safety protection for workers, in the case of sea and air transport, may derogate from Articles 14 and 15 in duly justified circumstances, with respect to whole-body vibration where, given the state of the art and the specific characteristics of workplaces, it is not possible to comply with the exposure limit value despite the technical and/or organisation measures taken.

Art.28 - (1) In a case where the exposure of a worker to mechanical vibration is usually below the exposure action values given in Article 5 paragraph (1) letter b) and Article 6 paragraph (1) letter b) but varies markedly from time to time and may occasionally exceed the exposure limit value, may be exempted from provisions of Article 14 and 15.

(2) The exposure value averaged over 40 hours must be less than the exposure limit value and there must be evidence to show that the risks from the pattern of exposure to the work are lower than those from exposure at the exposure limit value.

Art.29 - (1) Provisions referred to in Article 27 and 28 shall be applied only in 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.

(2) The provisions of the Article 27 and 28 shall not be applied as soon as the justifying circumstances no longer exist.

Art.30 - (1) This decision comes into force on 1st September 2006.

(2) Once this decision comes into force any contrary provisions are repealed.

This decision transposes the Directive 2002/44/EC on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (vibration), published in the Official Journal of the European Communities (OJEC) no. L 177/2002.

Bucharest, 22 December 2005.

No.1876.

MECHANICAL VIBRATION

A. HAND-ARM VIBRATION

1. Assessment of exposure

The assessment of the level of exposure to hand-arm vibration is based on the calculation of the daily exposure value normalised to an eight-hour reference period A (8), expressed as the square root of the sum of the squares (rms) (total value) of the frequency-weighted acceleration values, determined on the orthogonal axes a_{hw_x} , a_{hw_y} , a_{hw_z} as defined in Chapters 4 and 5 and Annex A to SR EN ISO standard 5349-1:2003.

The assessment of the level of exposure may be carried out on the basis of an estimate based on information provided by the manufacturers concerning the level of emission from the work equipment used, and based on the observation of specific work practices or on measurement.

2. Measurement

When measurement is employed in accordance with Article 7 of the decision:

- a) the methods used may include sampling, which must be representative of the personal exposure of a worker to the mechanical vibration in question;
- b) the methods and apparatus used must be adapted to the particular characteristics of the mechanical vibration to be measured, to ambient factors and to the characteristics of the measuring apparatus, in accordance with SR EN ISO standard 5349-2:2003;
- c) in the case of devices which need to be held with both hands, measurements must be made on each hand. The exposure is determined by reference to the higher value of the two; information for the other hand shall also be given.

3. Interference

Article 10 letter d) in the decision will apply, in particular where the mechanical vibration interferes with the proper handling of controls or reading of indicators.

4. Indirect risks

Article 10 letter d) in the decision will apply in particular when the mechanical vibration interferes with the stability of structures or the security of joints.

5. Individual protectors

Personal protective equipment against hand-arm vibration may be stipulated in the programme of measures referred to in Article 13 of the decision.

B. WHOLE-BODY VIBRATION

1. Assessment of exposure

The assessment of the level of exposure to vibration is based on the calculation of daily exposure A(8) expressed as equivalent continuous acceleration over an eight-hour period, calculated as the highest (rms) value, or the highest vibration dose value (VDV) of the frequency-weighted accelerations, determined on three orthogonal axes ($1,4a_{w_x}$, $1,4a_{w_y}$, a_{w_z} for a

seated or standing worker) in accordance with Chapters 5, 6 and 7 from Annex A and Annex B to SR ISO 2631-1:2000.

The assessment of the level of exposure may be carried out on the basis of an estimate based on information provided by the manufacturers concerning the level of emission from the work equipment used, and based on observation of specific work practices or on measurement.

In the case of maritime shipping, it is possible to consider only vibrations of a frequency exceeding 1 Hz.

2. Measurement

2.1. When measurement is employed in accordance with Article 7 from decision, the methods used may include sampling, which must be representative of the personal exposure of a worker to the mechanical vibration in question.

2.2. The methods used must be adapted to the particular characteristics of the mechanical vibration to be measured, to ambient factors and to the characteristics of the measuring apparatus.

3. Interference

The provisions of the Article 10 (d) will apply, in particular where the mechanical vibration interferes with the proper handling of controls or reading of indicators.

4. Indirect risks

The provisions referred to in Article 10 letter d) from decision will apply, in particular when the mechanical vibration interferes with the stability of structures or the security of joints.

5. Extension of exposure

The provisions referred to in Article 10 letter g) from decision will apply, in particular where, owing to the nature of the activity, a worker benefits from the use of rest facilities supervised by the employer.

The exposure to whole-body vibration in those facilities must be reduced to a level compatible with their purpose and conditions of use, except in cases of "force majeure".