

Based on Article 7 paragraph 2 of the Law on Safety and Health at Work (Official Gazette of RS No. 101/05),
the Minister of Labour, Employment and Social Policy adopts the

RULEBOOK

on preventive measures for safe and healthy work during exposure to noise

I General Provisions

Article 1

This Rulebook lays down the minimum requirements an employer shall meet in ensuring implementation of preventive measures in order to eliminate or reduce to the minimum extent possible the risk of injury or damage to health of employees that occur or may occur during exposure to noise, particularly risk of hearing impairment, requirements that legal persons with license for testing working environment conditions shall perform in the procedure of preventive and periodic testing of working environment conditions, limit value to noise exposure and action value of noise exposure.

Article 2

This Rulebook shall apply to workplaces at which tasks during which employees are or may be exposed to noise are performed.

Article 3

Physical parameters used in the procedure of risk assessment during exposure to noise shall be:

- 1) peak value of the sound pressure (p_{peak}) – is the highest value of “C” frequency weighed current sound pressure;
- 2) level of daily exposure to noise ($L_{\text{EX,8h}}$) (dB(A) re. 20 μPa) – is the time normalized medium level of exposure to noise for eight-hour working time, and it is calculated in a manner stipulated by point 3.6 of ISO 1999:1990 Standard;
- 3) level of weekly exposure to noise ($L_{\text{EX,8h}}$) – is the time normalized average of results of daily exposure for the working week of five eight-hour days, and it is calculated in a manner stipulated by point 3.6 of ISO 1999:1990 Standard.

Article 4

Daily limit value of exposure and daily action value of exposure to noise are:

- 1) limit value of exposure to noise: $L_{\text{EX,8h}} = 85 \text{ dB(A)}$ and $p_{\text{peak}} = 140 \text{ Pa}$ (137 dB(C) compared to reference sound pressure of 20 μPa);
- 2) action value of exposure to noise: $L_{\text{EX,8h}} = 80 \text{ dB(A)}$ and $p_{\text{peak}} = 112 \text{ Pa}$ (135 dB(C) compared to reference sound pressure of 20 μPa).

Article 5

When establishing the effective exposure of an employee to noise, compared to limit value of exposure to noise, reduction of exposure due to use of devices and equipment for the protection of hearing shall be considered.

When establishing the effective exposure of an employee to noise, compared to action value of exposure to noise, reduction of exposure due to use of devices and equipment for the protection of hearing shall not be considered.

Article 6

At workplaces at which tasks are performed during which the daily exposure to noise significantly varies from one to another working day, weekly exposure to noise may not exceed value of 85 dB(A) and appropriate preventive measures for reduction of risk because of exposure to noise shall be undertaken according to tasks performed.

Article 7

The legal person with license to test the working environment conditions shall perform preventive and periodic testing of working environment conditions according to ISO 1999:1990 Standard and use appropriate instrument and devices.

II Obligations of Employer

Article 8

In the process of assessment of risk from injury or damage to health because of exposure of employees to noise, the employer shall assess the level of noise, and ensure that measuring of the level of noise is performed if needed.

Article 9

The employer shall engage a legal person with a license for conducting preventive and periodic testing of the working environment conditions, based on the established hazards arising from exposure to noise.

Article 10

During the process of assessment of risk arising from exposure to noise, the employer shall particularly consider:

- 1) Level, type and duration of exposure, including exposure to impulse noise;
- 2) limit value and action value of exposure to noise;
- 3) activities that may influence safety and health at work of employees from vulnerable groups in terms of safety and health at work;
- 4) impact upon safety and health of employees arising from interaction between noise and ototoxic substances and between noise and vibrations;
- 5) indirect impact on safety and health of employees as a result of interaction between noise and sound signal, voice communication or another sound an employee is supposed to hear in order to reduce the risk from injury or damage to health;
- 6) data on noise emission obtained from equipment manufacturer according to special regulations;
- 7) other working equipment designed to reduce the noise emission;
- 8) prolonged exposure to noise the employer is responsible for;
- 9) information on results obtained from health status monitoring;
- 10) availability of devices and equipment for protection of hearing with appropriate damping effect.

Article 11

The employer shall perform assessment of risk from injuries or damage to health of employees, or perform partial amendment of the act on risk assessment for all the workplaces in working environment at which employees are or may be exposed to noise, if:

- 1) risk assessment was performed in such a manner that not all the factors of risk from exposure of employees to noise were recorded and assessed;
- 2) there has been a change in performing of tasks, or occurrence of new hazards and dangers or
- 3) it is required based on the results obtained from health status monitoring.

The employer shall establish measures to be undertaken in accordance with provisions of Articles 12–19 of this Rulebook by an act on risk assessment.

Article 12

Taking into account contemporary technical solutions and availability of measures for risk control at its source, as well as starting from principle of implementation of preventive measures, the employer shall eliminate the risk arising from employees' exposure to noise or reduce it to a minimum, and shall thereby consider the following:

- 1) Other operating methods the implementation of which reduces exposure to noise;
- 2) Selection of appropriate working equipment that, regarding tasks performed by an employee, emits the lowest possible level of noise, including an option to make other devices available to the employee in order to limit or reduce the exposure to noise;
- 3) Design and layout of workplaces;
- 4) informing and training of employees for safe and healthy work in order to introduce them to correct use of working equipment in order to reduce their exposure to noise to a minimum;
- 5) noise reduction through use of technical devices such as:
 - (1) noise reduction in the air by visors, fences, sound absorbing covers, etc.
 - (2) reduction of noise arising from constructions by damping or insulation;
- 6) corresponding programmes of workplace and working equipment maintenance;
- 7) reduction of exposure to noise through implementation of organizational measures, such as:
 - (1) reduction of duration and intensity of exposure,
 - (2) work schedule including the appropriate time of rest.

Article 13

If the risk assessment procedure establishes that the action value of exposure to noise is exceeded, the employer shall establish technical and/or organizational measures the implementation of which shall ensure reduction of exposure of employees to noise, thereby particularly considering measures stipulated in Article 12 of this Rulebook.

Article 14

The employer shall mark workplaces where the action value of exposure to noise may be exceeded according to risk assessment by signs for safety and health at work, and shall divide that are and secure it from access of employees not working at those workplaces.

Article 15

Employer shall ensure that noise in premises for rest is reduced to a level in accordance with their purpose and terms of use.

Article 16

Employer shall adjust measures for safety and health at work regarding reduction of exposure to noise to requirements of employees belonging to vulnerable groups in terms of safety and health at work.

Article 17

In situations when the risk of exposure of employees to noise may not be reduced by implementation of other measures for safe and healthy work, the employer shall enable use of the appropriate devices and equipment for hearing protection to the employee:

- 1) when the exposure is higher than the action value of exposure to noise, the employer shall make devices and equipment for hearing protection available to employees;
- 2) when the exposure is equal or higher than the limit value of exposure to noise, the employer shall provide devices and equipment for hearing protection to the employee.

The employer shall evaluate devices and equipment for hearing protection so as to eliminate or reduce the risk of hearing impairment to a minimum.

Article 18

Employer shall reduce exposure of employees to noise to a minimum, and in any case to the value lower than the limit value of exposure to noise.

If in spite of preventive measures the exposure is higher than the limit value of exposure to noise, the employer shall, as soon as possible, undertake appropriate measures in order to reduce exposure below the limit value of exposure to noise, identify reasons for exceeding the limit value of exposure to noise and correct implementation of measures in order to prevent repeated exceeding of the limit value of exposure to noise.

Article 19

Employer shall provide all the information on measures undertaken in order to achieve safe and healthy working conditions during exposure to noise to employees who are exposed to electromagnetic field and/or their representatives for safety and health at work as well as introduce those employees to all types of risk arising from exposure to noise during training for safe and healthy work, particularly regarding:

- 1) the nature of those risks;
- 2) measures undertaken in order to eliminate or reduce risks of damage to health due to exposure to noise;
- 3) existence of limit value of exposure and action value of exposure to noise;
- 4) results of assessment and measuring of noise, as well as meaning of those results;
- 5) correct use of devices and equipment for protection of hearing;
- 6) manner for identifying and reporting the signs of hearing impairment;
- 7) circumstances under which employees are entitled to health status monitoring in accordance with this Rulebook as well as purpose of health status monitoring;
- 8) safe manner of working in order to reduce exposure to a minimum.

Article 20

Employer shall provide the stipulated monitoring of health status for employees working, or supposed to work, at workplaces which the risk assessment results, of Article 8 of this Rulebook, identify as workplaces with increased risk of injuries at work or damages to health.

The employer shall send the employee working at workplace at which exposure is higher than limit values of exposure to noise to targeted medical examination as per their request.

Targeted medical examination from paragraph 2 of this Article shall be performed in a manner, per procedure and within timeframe as previous and periodic medical examination of employees at workplaces with increased risk.

When hearing impairment of an employee is established by a department of occupational medicine as a result of exposure to noise at the workplace, then:

- 1) the occupational medicine department shall inform the employee on the results of health status monitoring pertaining to that employee;
- 2) the employer shall:
 - (1) verify the risk assessment conducted in accordance with Article 8 of this Rulebook,
 - (2) correct preventive measures stipulated for elimination or reduction of risk pursuant to Articles 12–17. this Rulebook,
 - (3) take into account advice of department of occupational medicine when implementing preventive measures stipulated for elimination or reduction of risk pursuant to Articles 12-17 of this Rulebook, including transfer of employee to another workplace at which that employee shall not be exposed to noise;
 - (4) ensure health status monitoring of other employees exposed to noise in a similar manner.

III Cooperation of Employer and Employees

Article 21

Employer and employees, or their representatives for safety and health at work, shall cooperate on all issues related to implementation of preventive measures during exposure to noise, particularly regarding:

- 1) risk assessment and establishing the preventive measures in accordance with this Rulebook;
- 2) implementation of measures aiming at elimination or reduction of risks arising from exposure to noise;
- 4) selection of devices and equipment for protection of hearing.

IV Transitional and Final Provisions

Article 22

As from the date on which this Rulebook is applied, the Rulebook on measures and norms of protection at work from noise in working premises ("Official Gazette of SFRY", number 21/92) shall cease to have effect.

Article 23

This Rulebook shall enter into force on the eight day upon publishing in "Official Gazette of the Republic of Serbia", and shall apply as of January 1, 2016.

Number 110-00-00008/2011-01
In Belgrade, on December 6, 2011

MINISTER

Rasim Ljajić