Directive 2013/35/EU of the European Parliament and of the Council of 26 June 2013 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields) (20th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) and repealing Directive 2004/40/EC

CHAPTER II

OBLIGATIONS OF EMPLOYERS

Article 5

Provisions aimed at avoiding or reducing risks

1 Taking account of technical progress and the availability of measures to control the production of electromagnetic fields at the source, the employer shall take the necessary actions to ensure that risks arising from electromagnetic fields at the workplace are eliminated or reduced to a minimum.

The reduction of risks arising from exposure to electromagnetic fields shall be based on the general principles of prevention set out in Article 6(2) of Directive 89/391/EEC.

2 On the basis of the risk assessment referred to in Article 4, once the relevant ALs, referred to in Article 3 and in Annexes II and III, are exceeded and unless the assessment carried out in accordance with Article 4(1), (2) and (3) demonstrates that the relevant ELVs are not exceeded and that safety risks can be excluded, the employer shall devise and implement an action plan that shall include technical and/or organisational measures to prevent exposure exceeding the health effects ELVs and sensory effects ELVs, taking into account, in particular:

- a other working methods that entail less exposure to electromagnetic fields;
- b the choice of equipment emitting less intense electromagnetic fields, taking account of the work to be done;
- c technical measures to reduce the emission of electromagnetic fields, including, where necessary, the use of interlocks, shielding or similar health protection mechanisms;
- d appropriate delimitation and access measures, such as signals, labels, floor markings, barriers, in order to limit or control access;
- e in the case of exposure to electric fields, measures and procedures to manage spark discharges and contact currents through technical means and through the training of workers;
- f appropriate maintenance programmes for work equipment, workplaces and workstation systems;
- g the design and layout of workplaces and workstations;
- h limitations of the duration and intensity of the exposure; and
- i the availability of adequate personal protection equipment.

3 On the basis of the risk assessment referred to in Article 4, the employer shall devise and implement an action plan that shall include technical and/or organisational measures to prevent any risks to workers at particular risk, and any risks due to indirect effects, referred to in Article 4. Status: This is the original version (as it was originally adopted).

4 In addition to providing the information set out in Article 6 of this Directive, the employer shall, pursuant to Article 15 of Directive 89/391/EEC, adapt the measures referred to in this Article to the requirements of workers at particular risk and, where applicable, to individual risks assessments, in particular in respect of workers who have declared the use of active or passive implanted medical devices, such as cardiac pacemakers, or the use of medical devices worn on the body, such as insulin pumps, or in respect of pregnant workers who have informed their employer of their condition.

5 On the basis of the risk assessment referred to in Article 4, workplaces where workers are likely to be exposed to electromagnetic fields that exceed the ALs shall be indicated by appropriate signs in accordance with Annexes II and III and 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 (ninth 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, as appropriate. Where access to these areas is suitably restricted for other reasons and workers are informed of the risks arising from electromagnetic fields, signs and access restrictions specific to electromagnetic fields shall not be required.

6 Where Article 3(3)(a) applies, specific protection measures shall be taken, such as the training of workers in accordance with Article 6 and the use of technical means and personal protection, for example the grounding of work objects, the bonding of workers with work objects (equipotential bonding) and, where appropriate and in accordance with Article 4(1)(a) 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 $89/391/EEC)^{(2)}$, the use of insulating shoes, gloves and protective clothing.

7 Where Article 3(4)(a) applies, specific protection measures, such as controlling movements, shall be taken.

8 Workers shall not be exposed above the health effects ELVs and sensory effects ELVs, unless the conditions under either Article 10(1)(a) or (c) or Articles 3(3) or (4) are fulfilled. If, despite the measures taken by the employer, the health effects ELVs and sensory effects ELVs are exceeded, the employer shall take immediate action to reduce exposure below these ELVs. The employer shall identify and record the reasons why the health effects ELVs and sensory effects ELVs have been exceeded, and shall amend the protection and prevention measures accordingly in order to prevent them being exceeded again. The amended protection and prevention measures shall be preserved in a suitable traceable form so as to permit consultation at a later stage, in accordance with national law and practice.

9 Where paragraphs 3 and 4 of Article 3 apply and where the worker reports transient symptoms, the employer shall, if necessary, update the risk assessment and the prevention measures. Transient symptoms may include:

- a sensory perceptions and effects in the functioning of the central nervous system in the head evoked by time varying magnetic fields; and
- b static magnetic field effects, such as vertigo and nausea.

Status: This is the original version (as it was originally adopted).

- (**1**) OJ L 245, 26.8.1992, p. 23.
- (**2**) OJ L 393, 30.12.1989, p. 18.