

---

STATUTORY INSTRUMENTS

---

**2016 No. 1026**

**The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Electromagnetic Fields) Regulations 2016**

**PART 2**

**EXPOSURE AND RISK**

**Limitation on exposure to electromagnetic fields**

**5.—**(1) Subject to paragraphs (2) and (3), an employer must ensure that workers are not exposed to electromagnetic field levels in excess of the ELVs.

(2) Exposure may exceed the sensory effect ELVs during work activities in respect of which the employer has taken the applicable safety measures contained in the Schedule(1).

(3) Paragraph (1) does not apply in relation to the exposure of workers to electromagnetic fields during the development, testing, installation, use and maintenance of, or research related to, magnetic resonance imaging equipment for medical use, providing—

- (a) the exposure of workers to electromagnetic fields is as low as is reasonably practicable; and
- (b) workers are protected against any health effects and safety risks related to that exposure.

(4) In this regulation—

“sensory effect ELV” means the sensory effect ELVs set out in Part 2 of the Schedule.

**Exposure assessment**

**6.—**(1) Subject to paragraph (5), the employer must make a suitable and sufficient assessment of the levels of electromagnetic fields to which workers may be exposed.

(2) Where regulation 5(1) applies—

- (a) the assessment must demonstrate whether that regulation is complied with, if necessary through the use of calculations and measurements; and
- (b) the employer may, in accordance with the Schedule(2), assess exposure against the ALs in order to determine that specific ELVs are not exceeded.

(3) An assessment may take into account—

- (a) emission information and other safety related data provided by the manufacturer or distributor of equipment;
- (b) industry standards and guidelines;
- (c) guidance produced by the European Commission; and
- (d) guidance produced by the Secretary of State.

---

(1) See paragraph 6 of Part 1 of the Schedule.

(2) See paragraphs 3 and 4 of Part 1 of the Schedule.

(4) The employer must review an assessment when—

- (a) there is reason to suspect it is no longer valid, or
- (b) there has been a significant change in the matters to which it relates,

and make such changes to it as are necessary to ensure it remains suitable and sufficient.

(5) Where an employer has made an assessment before the date on which these Regulations come into force, which assessment would have complied with the requirements of this regulation, that employer is to be treated, on and after that date, as having complied with paragraph (1).

### **Application of regulations 8 to 10**

7.—(1) Regulation 8 does not apply—

- (a) where the most recent exposure assessment under regulation 6 demonstrates compliance with regulation 5(1); or
- (b) in relation to activities set out in regulation 5(3).

(2) Regulations 9 and 10 do not apply where—

- (a) the most recent exposure assessment under regulation 6 demonstrates that workers are not exposed to electromagnetic field levels in excess of the ELVs;
- (b) the indirect effect ALs are not exceeded; and
- (c) there are no workers at particular risk.

(3) In this regulation—

“indirect effect ALs” means the Low ALs in Table AL1, and the ALs in Tables AL5 to AL7, in the Schedule.

### **Action plan**

8.—(1) The employer must make and implement a suitable and sufficient action plan to ensure compliance with regulation 5(1).

(2) The action plan must include consideration of, where relevant—

- (a) other working methods that entail lower exposure to electromagnetic fields;
- (b) replacement equipment designed to reduce the level of exposure;
- (c) technical measures to reduce the emission of electromagnetic fields, including, where necessary, the use of interlocks, screening or similar health protection mechanisms;
- (d) demarcation and access control measures;
- (e) maintenance programmes for work equipment, workplaces and workstation systems;
- (f) the design and layout of workplaces and workstations;
- (g) limitations on the duration and intensity of exposure; and
- (h) the availability of suitable personal protection equipment.

(3) Where, despite the measures taken in accordance with paragraph (1), the exposure of workers exceeds any ELV the employer must, as soon as is reasonably practicable, identify and implement any changes to the action plan which are necessary to ensure compliance with regulation 5(1).

### **Risk assessment**

9.—(1) Subject to paragraph (5), the employer must make a suitable and sufficient assessment of the risks to workers arising from their exposure to electromagnetic fields.

(2) The risk assessment must include consideration of, where relevant—

- (a) the ALs and ELVs;
  - (b) the frequency range, level, duration and type of exposure, including its distribution over the worker's body and the workplace;
  - (c) direct biophysical effects;
  - (d) replacement equipment designed to reduce the level of exposure;
  - (e) information obtained from any health surveillance or medical examinations provided under regulation 20;
  - (f) information provided by the manufacturer or distributor of equipment;
  - (g) multiple sources of exposure;
  - (h) simultaneous exposure to multiple frequency fields;
  - (i) indirect effects;
  - (j) any effects on workers at particular risk; and
  - (k) other health and safety related information.
- (3) The risks referred to in paragraph (1) do not include the risk of effects—
- (a) caused by contact with live conductors;
  - (b) caused by multiple and separate instances of exposure; or
  - (c) which continue to develop when exposure has ceased.
- (4) The employer must review the assessment when—
- (a) there is reason to suspect it is no longer valid, or
  - (b) there has been a significant change in the matters to which it relates,
- and make such changes to it as are necessary to ensure it remains suitable and sufficient.
- (5) Where an employer has made an assessment before the date on which these Regulations come into force, which assessment would have complied with the requirements of this regulation, that employer is to be treated, on and after that date, as having complied with paragraph (1).

#### **Obligation to eliminate or reduce risks**

- 10.**—(1) The employer must ensure that, so far as is reasonably practicable, the risks identified in the most recent risk assessment under regulation 9 are eliminated or reduced to a minimum.
- (2) Measures taken under paragraph (1) must—
- (a) be based on the general principles of prevention set out in regulation 5(1) of the General Duties Regulations; and
  - (b) take into account technical progress, the potential to restrict access to parts of the workplace, and the availability of measures to control the production of electromagnetic fields at source.