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STATUTORY RULES OF NORTHERN IRELAND

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**2016 No. 266**

**The Control of Electromagnetic Fields at  
Work Regulations (Northern Ireland) 2016**

**PART 1**

**INTRODUCTION**

**Citation and commencement**

1. These Regulations may be cited as the Control of Electromagnetic Fields at Work Regulations (Northern Ireland) 2016 and shall come into operation on 1st August 2016.

**Interpretation**

2.—(1) In these Regulations—

“AL” means an action level set out in Parts 2 and 3 of Schedule 1;

“designated area” means any area designated by Order under section 1(7) of the Continental Shelf Act 1964(1) and “within a designated area” includes over and under it;

“direct biophysical effect” means an effect on human body tissue caused by its presence in an electromagnetic field;

“electromagnetic field” means a static electric, static magnetic and time-varying electric, magnetic and electromagnetic field with a frequency of up to 300 GHz;

“ELV” means an exposure limit value set out in Part 2 of Schedule 1;

“employee at particular risk” means—

- (a) an employee who has declared to his or her employer a condition which may lead to a higher susceptibility to the potential effects of exposure to electromagnetic fields; or
- (b) an employee who works in close proximity to electro-explosive devices, explosive materials or flammable atmospheres;

“the Executive” means the Health and Safety Executive for Northern Ireland;

“health effect” means a direct biophysical effect which is potentially harmful to human health;

“indirect effect” means an effect, caused by the presence of an object or a substance in an electromagnetic field, which may present a safety or health hazard;

“sensory effect” means a direct biophysical effect involving a transient disturbance in sensory perception or a minor and temporary change in brain function; and

“territorial sea” means the territorial sea of the United Kingdom adjacent to Northern Ireland and “within the territorial sea” includes on, over and under it.

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(1) 1964 c. 29; section 1 was amended by the Oil and Gas (Enterprise) Act 1982 (1982 c. 23), Schedule 3, paragraph 1 and by the Energy Act 2011 (c. 16), section 103

(2) In these Regulations a reference to employees is, in relation to an employer, to be treated as a reference to the employees of that employer while they are at work.

### **Application**

3. These Regulations do not apply to the master or crew of a ship or to the employer of such persons in respect of the normal shipboard activities of a ship's crew which are carried out solely by the crew under the direction of the master, and for the purposes of this regulation "ship" includes every description of vessel used in navigation, other than a ship forming part of Her Majesty's Navy.

## **PART 2**

### **EXPOSURE AND RISK**

#### **Limitation on exposure to electromagnetic fields**

4.—(1) Subject to paragraphs (2) and (3), an employer shall ensure that employees 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 set out in Schedule 1(2).

(3) Paragraph (1) does not apply in relation to—

- (a) any activity in respect of which a suitable and sufficient exposure limitation system is in place, where that activity is carried out—
  - (i) by a person acting in the capacity of a member of either Her Majesty's armed forces or a visiting force;
  - (ii) by any civilian working with such a person; or
  - (iii) on any premises or part of premises under the control of the Secretary of State for the purposes of the Ministry of Defence or the service authorities of a visiting force; or
- (b) the development, testing, installation, use and maintenance of, or research related to, magnetic resonance imaging equipment for patients in the health sector, where—
  - (i) the exposure of employees to electromagnetic fields is as low as is reasonably practicable; and
  - (ii) employees are protected against any health effects and safety risks related to that exposure.

(4) In paragraph (2), "sensory effect ELVs" means the sensory effect ELVs set out in Part 2 of Schedule 1.

(5) In paragraph (3)(a)—

"Her Majesty's armed forces" means the regular forces and the reserve forces as defined in section 374 of the Armed Forces Act 2006(3);

"service authorities" and "visiting force" have the meaning given in section 12 of the Visiting Forces Act 1952(4).

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(2) See paragraph 6 of Part 1 of Schedule 1

(3) 2006 c.52. The definition of "the reserve force" was amended by section 44 of the Defence Reform Act 2014 (c.20)

(4) 1952 c.67. The definition of "visiting force" was amended by paragraph 14 of Schedule 15 to the Criminal Justice Act 1988 (c.33)

## **Exposure assessment**

5.—(1) The employer shall make a suitable and sufficient assessment of the levels of electromagnetic fields to which employees may be exposed.

- (2) Where regulation 4(1) applies—
- (a) the assessment shall demonstrate whether that regulation is complied with, if necessary through the use of calculations and measurements; and
  - (b) the employer may, in accordance with Schedule 1(5), assess exposure against the ALs in order to determine that specific ELVs are not exceeded.
- (3) The 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 Executive.
- (4) The employer shall 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.

## **Application of regulations 7 to 9**

- 6.—(1) Regulation 7 does not apply—
- (a) where the most recent exposure assessment under regulation 5 demonstrates compliance with regulation 4(1); or
  - (b) in relation to activities set out in regulation 4(3).
- (2) Regulations 8 and 9 do not apply where—
- (a) the most recent exposure assessment under regulation 5 demonstrates that employees 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 employees at particular risk.

(3) In paragraph (2)(b), “indirect effect ALs” means the Low ALs in Table AL1 and the ALs in Tables AL5 to AL7, in Schedule 1.

## **Action plan**

7.—(1) The employer shall make and implement a suitable and sufficient action plan to ensure compliance with regulation 4(1).

- (2) The action plan shall 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;

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(5) See paragraphs 3 and 4 of Part 1 of Schedule 1

- (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 protective equipment.

(3) Where, despite the measures taken under paragraph (1), the exposure of employees exceeds any ELV the employer shall, as soon as is reasonably practicable, identify and implement any changes to the action plan which are necessary to ensure compliance with regulation 4(1).

### **Risk assessment**

**8.—**(1) The employer shall make a suitable and sufficient assessment of the risks to employees arising from their exposure to electromagnetic fields.

- (2) The risk assessment shall 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 employee'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 11;
  - (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 employees 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 shall 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.

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

**9.—**(1) The employer shall ensure that, so far as is reasonably practicable, the risks identified in the most recent risk assessment under regulation 8 are eliminated or reduced to a minimum.

- (2) Measures taken under paragraph (1) shall—
  - (a) be based on the general principles of prevention set out in Schedule 1 to the Management of Health and Safety at Work Regulations (Northern Ireland) 2000(6); and

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(6) S.R. 2000 No. 388, as amended by S.R. 2001 No. 348, S.R. 2003 No. 454, S.R. 2006 No. 255, S.R. 2011 No. 350 and S.R. 2015 No. 265; revoked in part by S.R. 2007 No. 291

- (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.

## PART 3

### MISCELLANEOUS

#### **Information and training**

**10.** The employer shall provide relevant information and training to any employees who are likely to be subjected to the risks identified in the most recent risk assessment under regulation 8, including in relation to—

- (a) the measures taken under regulation 9;
- (b) the concepts and values of the ALs and ELVs and the possible risks associated with them;
- (c) the possible indirect effects of exposure;
- (d) the results of the most recent exposure assessment under regulation 5;
- (e) how to detect and report sensory and health effects;
- (f) the circumstances in which employees are entitled to health surveillance and medical examinations under regulation 11;
- (g) safe working practices; and
- (h) any additional measures taken in respect of employees at particular risk.

#### **Health surveillance and medical examinations**

**11.—(1)** The employer shall ensure that health surveillance and medical examinations are provided as appropriate to any employee who—

- (a) is exposed to electromagnetic field levels in excess of the health effect ELVs; and
- (b) reports experiencing a health effect to that employer.

(2) Any health surveillance or medical examinations shall be provided during any reasonable hours chosen by the employee.

(3) The employer shall keep a suitable record of any health surveillance and medical examinations provided.

(4) In paragraph (1)(a), “health effect ELVs” means the health effect ELVs set out in Part 2 of Schedule 1.

#### **Records**

**12.** An employer who employs five or more employees shall—

- (a) record the significant findings of the most recent exposure assessment under regulation 5; and
- (b) where required to make them, record—
  - (i) the most recent action plan under regulation 7; and
  - (ii) the significant findings of the most recent risk assessment under regulation 8.

### **Exemptions**

**13.**—(1) The Executive may by a certificate in writing exempt employers from the requirements of regulations 4(1) and 7 in relation to one or more work activities.

(2) An exemption under paragraph (1) shall be limited in time and subject to the conditions that—

(a) the exposure of employees to electromagnetic fields is as low as is reasonably practicable; and

(b) employees are protected against any health effects and safety risks related to that exposure.

(3) The Executive may amend or revoke an exemption at any time by a further certificate in writing.

### **Application within the territorial sea or a designated area**

**14.** Within the territorial sea or a designated area these Regulations shall apply only to and in relation to the premises and activities to which any of paragraphs 2 to 9 of Schedule 2 apply.

Sealed with the Official Seal of the Department for the Economy on 4th July 2016.



*Jackie Kerr*  
A senior officer of the Department for the  
Economy