

## SCHEDULE

## PART 2

## Direct biophysical effects of exposure

## Action levels – non-thermal effects

**Table AL1 – ALs for exposure to electromagnetic fields from 1 Hz to 10 MHz**

<i>Frequency range</i>	<i>External electric field strength Low ALs (E) [Vm<sup>-1</sup>]</i>	<i>External electric field strength High ALs (E) [Vm<sup>-1</sup>]</i>
$1 \leq f < 25 \text{ Hz}$	$2.0 \times 10^4$	$2.0 \times 10^4$
$25 \leq f < 50 \text{ Hz}$	$5.0 \times 10^5/f$	$2.0 \times 10^4$
$50 \text{ Hz} \leq f < 1.64 \text{ kHz}$	$5.0 \times 10^5/f$	$1.0 \times 10^6/f$
$1.64 \leq f < 3 \text{ kHz}$	$5.0 \times 10^5/f$	$6.1 \times 10^2$
$3 \text{ kHz} \leq f \leq 10 \text{ MHz}$	$1.7 \times 10^2$	$6.1 \times 10^2$
Exposure levels not exceeding the ALs will be compliant with:	Tables ELV2 and ELV3	

**Notes**

1. Between the Low and High ALs, exposure will be below the ELVs but spark discharges may occur. These can be prevented through the provision of information and training under regulation 10 and the use of suitable technical and personal protection measures.

2. The ALs in Tables AL1 and AL2 are root mean square (RMS) values of the field strength. These RMS values are equal to the peak values divided by  $\sqrt{2}$  for sinusoidal fields. The corresponding ELVs in Tables ELV2 and ELV3 are peak values in time, which are equal to the RMS values multiplied by  $\sqrt{2}$  for sinusoidal fields. In the case of non-sinusoidal fields the exposure assessment under regulation 5 must be based on the weighted peak method (filtering in time domain) or on a scientifically proven and validated exposure evaluation procedure which produces comparable results to the weighted peak method.

3. The ALs represent the maximum field values at any place where an employee may be working, before the entry of any person into the field. In the case of an electromagnetic field source in the immediate vicinity of the body, compliance with the ELVs must be determined dosimetrically, case by case.

**Table AL2 – ALs for exposure to electromagnetic fields from 1 Hz to 10 MHz**

<i>Frequency range</i>	<i>Magnetic flux density Low ALs (B)[<math>\mu\text{T}</math>]</i>	<i>Magnetic flux density High ALs (B)[<math>\mu\text{T}</math>]</i>	<i>Magnetic flux density ALs for exposure of limbs to a localised magnetic field (B) [<math>\mu\text{T}</math>]</i>
$1 \leq f < 8 \text{ Hz}$	$2.0 \times 10^5/f^2$	$3.0 \times 10^5/f$	$9.0 \times 10^5/f$

**Status:** This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

<i>Frequency range</i>	<i>Magnetic flux density Low ALs (B)[<math>\mu T</math>]</i>	<i>Magnetic flux density High ALs (B)[<math>\mu T</math>]</i>	<i>Magnetic flux density ALs for exposure of limbs to a localised magnetic field (B) [<math>\mu T</math>]</i>
$8 \leq f < 25 \text{ Hz}$	$2.5 \times 10^4/f$	$3.0 \times 10^5/f$	$9.0 \times 10^5/f$
$25 \leq f < 300 \text{ Hz}$	$1.0 \times 10^3$	$3.0 \times 10^5/f$	$9.0 \times 10^5/f$
$300 \text{ Hz} \leq f < 3 \text{ kHz}$	$3.0 \times 10^5/f$	$3.0 \times 10^5/f$	$9.0 \times 10^5/f$
$3 \text{ kHz} \leq f \leq 10 \text{ MHz}$	$1.0 \times 10^2$	$1.0 \times 10^2$	$3.0 \times 10^2$
Exposure levels not exceeding the ALs will be compliant with:	At and below 400 Hz: the sensory effect ELVs in Table ELV3	The health effect ELVs in Table ELV2	
	Above 400 Hz: the health effect ELVs in Table ELV2		

#### Notes

1. Between the Low and High ALs for exposure up to 400 Hz, exposure in the head of the employee will be below the health effect ELVs but may exceed the sensory effect ELVs in Table ELV3.
2. Notes 2 and 3 to Table AL1 apply.