

PRILOGA

Pregled zakonskih omejitev elektromagnetnih sevanj v državah članicah EU ter nekaterih tretjih državah

Table 1: Exposure limits for the general public for electromagnetic fields in inhabited areas in member states of the European Union and selected industrial nations outside the European Union (situation April 2011)

Country:	50 Hz (ELF)		900 MHz (GSM)			1800 MHz (GSM)			2100 MHz (UMTS)		
	electric field strength (V/m)	magnetic flux density (μ T)	electric field strength (V/m)	magnetic flux density (μ T)	equivalent plain wave power density (W/m ²)	electric field strength (V/m)	magnetic flux density (μ T)	equivalent plain wave power density (W/m ²)	electric field strength (V/m)	magnetic flux density (μ T)	equivalent plain wave power density (W/m ²)
Recommendation 1999/519/EC	5000	100	41	0.14	4.5	58	0.20	9	61	0.20	10
Austria	[5000]	[100]	[41]	[0.14]	[4.5]	[58]	[0.20]	[9]	[61]	[0.20]	[10]
Belgium (Flanders)	—	10	21 ¹⁾	—	—	29 ¹⁾	—	—	31 ¹⁾	—	—
Bulgaria	— ¹⁾	— ¹⁾	—	—	0.1	—	—	0.1	—	—	0.1
Cyprus	[5000]	[100]	41	0.14	4.5	58	0.20	9	61	0.20	10
Czech Republic	5000	100	41	0.14	4.5	58	0.20	9	61	0.20	10
Denmark	— ¹⁾	— ¹⁾	—	—	—	—	—	—	—	—	—
Estonia	5000	100	41	0.14	4.5	58	0.20	9	61	0.20	10
Finland	[5000]	[100]	41	0.14	4.5	58	0.20	9	61	0.20	10
France	5000 ¹⁾	100 ¹⁾	41	0.14	4.5	58	0.20	9	61	0.20	10
Germany	5000	100	41	0.14	4.5	58	0.20	9	61	0.20	10
Greece	5000	100	32 ¹⁾	0.11 ¹⁾	2.7 ¹⁾	48 ¹⁾	0.15 ¹⁾	5.4 ¹⁾	47 ¹⁾	0.16 ¹⁾	6 ¹⁾
Hungary	5000	100	41	0.14	4.5	58	0.20	9	61	0.20	10
Ireland	[5000]	[100]	41	0.14	4.5	58	0.20	9	61	0.20	10
Italy	— ¹⁾	3 ¹⁾	6 ¹⁾	0.02 ¹⁾	0.1 ¹⁾	6 ¹⁾	0.02 ¹⁾	0.1 ¹⁾	6 ¹⁾	0.02 ¹⁾	0.1 ¹⁾
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	500 ¹⁾	—	—	—	0.1	—	—	0.1	—	—	0.1
Luxembourg	5000 ¹⁾	100 ¹⁾	41 ¹⁾	0.14	4.5	58 ¹⁾	0.2	9	61 ¹⁾	0.20	10
Malta	[5000]	[100]	41	0.14	4.5	58	0.20	9	61	0.20	10
Netherlands	— ¹⁾	— ¹⁾	—	—	—	—	—	—	—	—	—
Poland	1000	75	7	—	0.1	7	—	0.1	7	—	0.1
Portugal	5000	100	41	0.14	4.5	58	0.20	9	61	0.20	10
Romania	5000	100	41	0.14	4.5	58	0.20	9	61	0.20	10
Slovakia	5000	100	41	0.14	4.5	58	0.20	9	61	0.20	10
Slovenia	500 ¹⁾	10 ¹⁾	13 ¹⁾	0.04 ¹⁾	0.45 ¹⁾	18 ¹⁾	0.06 ¹⁾	0.9 ¹⁾	19 ¹⁾	0.06 ¹⁾	1 ¹⁾
Spain	—	—	41	0.14	4.5	58	0.20	9	61	0.20	10
Sweden	— ¹⁾	— ¹⁾	[41]	[0.14]	[4.5]	[58]	[0.20]	[9]	[61]	[0.20]	[10]
United Kingdom	—	—	[41]	[0.14]	[4.5]	[58]	[0.20]	[9]	[61]	[0.20]	[10]
Australia	[5000] ¹⁾	[100] ¹⁾	41	0.14	4.5	58	0.20	9	61	0.20	10
Russia	500	10	—	—	0.1	—	—	0.1	—	—	0.1
Switzerland	—	1 ¹⁾	4 ¹⁾	—	—	6 ¹⁾	—	—	6 ¹⁾	—	—
U.S.A.	— ¹⁾	— ¹⁾	—	—	0	—	—	10	—	—	10

All limits are given as root mean squares (rms) values. Where necessary magnetic flux density was calculated from magnetic field strength using a magnetic permeability of $4\pi \cdot 10^{-7}$ H/m. Normal typeface: reference level for the external field in the meaning of Recommendation 1999/519/EC, derived from basic restriction. Application is mandatory unless value is in square brackets. *Italic typeface*: mandatory exposure limit in terms of the external field outside the body.

Notes:

- 1) Regional regulation; maximum per antenna in Flanders or per site in Brussels: 3.0 V/m at 900 MHz, 4.2 V/m at 1800 MHz, 4.5 V/m at 2100 MHz; maximum per antenna in Wallonia: 3 V/m
- 2) Minimal distances to power lines and to electrical distribution systems, differentiated by voltage; separate regulation for video display units
- 3) For new developments: agreement between local government and electricity sector to examine measures to reduce magnetic fields if average yearly exposure above 0.4 μ T
- 4) For new or modified installations, technical conditions for electricity distribution
- 5) For antenna stations closer than 300 m to "sensitive" locations (schools, kindergartens, hospitals, care homes); elsewhere 35 V/m, 0.11 μ T, 3.1 W/m² at 900 MHz; 49 V/m, 0.16 μ T, 6.3 W/m² at 1800 MHz; 51 V/m, 0.17 μ T, 7 W/m² at 2100 MHz
- 6) For new installations near homes, schools, playgrounds; 10 μ T for existing installations near homes, schools, playgrounds; 1999/519/EC for all other places
- 7) Near homes and their outdoor annexes, in schools and playgrounds, in places with stay greater than 4 hours; elsewhere 20 V/m, 0.06 μ T, 1 W/m²
- 8) Limit inside homes; outside homes 1000 V/m; suburban green zone, roads 10000 V/m; uninhabited 15000 V/m
- 9) Security conditions for electricity lines; there are also voluntary minimal distances to power lines for new developments
- 10) Limit per antenna 3.0 V/m
- 11) Recommendation to local government: create no new situations of long-term stay of children in magnetic flux density greater than 0.4 μ T around power lines
- 12) Applies to homes, hospitals, health resorts, public buildings, tourism buildings, schools, nurseries, playgrounds, parks, recreational areas; otherwise limit for external electric and magnetic field strength equal to reference level in 1999/519/EC; for power frequency limits apply to new or reconstructed sources only
- 13) Reduce exposure radically deviating from natural background when possible at reasonable expense with reasonable consequences
- 14) For continuous exposure: for few hours per day, 10000 V/m and 1 mT; for few minutes per day, more than 10000 V/m or 1 mT, provided basic restriction is met
- 15) For new installations at places of sensitive use (buildings in which persons stay for longer periods, playgrounds); for existing installations limit for external electric field strength and magnetic flux density as reference level in 1999/519/EC, but optimise order of phases at places of sensitive use
- 16) Limit per location for new and existing antenna installations at places of sensitive use (buildings in which persons stay for longer periods, playgrounds); limit for aggregate exposure from multiple antenna locations equal to reference level in 1999/519/EC
- 17) No federal regulation; limits are set in some states, other states have prudent avoidance policy (measures to reduce exposure of the population at reasonable cost)