Measurements of ELF electric and magnetic fields and radio (RF) radiation

Please refer to the separate instructions for completing this form (version 1.0/2014).

Please enter, mark, circle, or underline as appropriate!

1

Testing conditions for sleeping areas

Date: .... Zip code: ....

Name of room: ....

- SFDH / SDH / THC / THE / MFH ➔ Built in ....
- Masonry / lightweight / wood construction
- Basement / GF / UF ...../ TF
- Wall/roof insulation with ALU foil / shielding ....
- Single bed(s) / double bed / bunk bed / children's bed
- Water bed, innerspring mattress, electrically adjustable

Description of the environment

- Room shares wall(s) with: neighboring apartment / exterior wall / office spaces / kitchen, etc. ....
- Railway line / high-voltage power line / transformer inside the house / at ....m distance to the house
- Electrical service: underground / overhead / vertical feeder cable at a distance of .... m
- Devices / EMF sources near bed: ....
- Special features: ....

....

2

ELF electric fields

Measurement without ground reference with 3D probe across grid
Enter all values or only the Min + Max value per grid
Electric field strength in **V/m** (RMS)
Dominant frequency: 16.7 Hz / 50/60 Hz / .... Hz

EMF meter: 3D-EFM / EPL3 / EFA-3 / ESM-100 / NFA...... / .... Meter last tested on ....

Cutoff switch present ☐ ➔ Works ☐ ➔ More than one room disconnected ☐
Shielded electric wiring system ☐

A) Initial situation ➔ Without cutoff switch(es) / without disconnected circuit breakers

First bed or single bed

Head	①	④	⑦	♀ / ♂
	②	⑤	⑧	
	③	⑥	⑨	CH / AD

Second / upper bed

Head	①	④	⑦	♀ / ♂
	②	⑤	⑧	
	③	⑥	⑨	CH / AD

Main source .... Sources next to bed: ☐

B) After disconnecting circuit breakers / removal of sources (remediation recommendations)

First bed or single bed

Head	①	④	⑦	♀ / ♂
	②	⑤	⑧	
	③	⑥	⑨	CH / AD

Second / upper bed

Head	①	④	⑦	♀ / ♂
	②	⑤	⑧	
	③	⑥	⑨	CH / AD

Disconnect circuit breakers .... Use cutoff switch(es) ☐

Bed against a wall: ☐ • Bed length left / right • Bed width top / bottom

Notes / sketch:

Measurement code no.: ______________________ Name of technician: ______________

For statistical analysis, send the completed form to:
VDB-Geschäftsstelle, Roggenkamp 21, 21266 Jesteburg, Fax 04183-7735302

3 ELF magnetic fields

Magnetic flux density (RMS) in **nT**
Enter only Min + Max value per grid

Dominant frequency: 16.7 Hz / 50/60 Hz /………Hz

EMF meter: Mlog-3D / EMlog2 / DL-MW10 / FM10 / EFA-3 / ESM-100 / NFA……. / ……. Meter last tested on ……….

A) Initial situation **Time:** ………………………

First bed or single bed

Head			
	①	④	⑦
	②	⑤	⑧
	③	⑥	⑨

♀ / ♂ CH / AD

Second / upper bed

Head			
	①	④	⑦
	②	⑤	⑧
	③	⑥	⑨

♀ / ♂ CH / AD

Main source: ………………………………………………………….............. Power supply near the bed: ☐

B) Situation after the removal of the main source **Time :** ……...................

First bed or single bed

Head			
	①	④	⑦
	②	⑤	⑧
	③	⑥	⑨

♀ / ♂ CH / AD

Second / upper bed

Head			
	①	④	⑦
	②	⑤	⑧
	③	⑥	⑨

♀ / ♂ CH / AD

4 Long-term measurement (48 h): **Mon – Fri** (not on weekends) **– Head area only**: near / under the bed

First bed or single bed

Start (date & time): ..……………………..............
Stop (date & time): ………………………….............

Second / upper bed

Start (date & time): ………………………..........
Stop (date & time): ……………….……...........

Statistical date from the analysis software in the time interval

C) 48 h recording – situation after the removal of the main source

From **48 h total** recording time

nT	Min	Max	AVG	95th centile
16.7 Hz				
50 Hz				

From **48 h total** recording time

nT	Min	Max	AVG	95th centile
16.7 Hz				
50 Hz				

D) 1. Night interval 10 p.m. – 6 a.m.

nT	Min	Max	AVG	95th centile
16.7 Hz				
50 Hz				

1. Night interval 10 p.m. – 6 a.m.

nT	Min	Max	AVG	95th centile
16.7 Hz				
50 Hz				

E) 2. Night interval 10 p.m. – 6 a.m.

nT	Min	Max	AVG	95th centile
16.7 Hz				
50 Hz				

2. Night interval 10 p.m. – 6 a.m.

nT	Min	Max	AVG	95th centile
16.7 Hz				
50 Hz				

5 RF radiation

Number of radio service(s) .... • Visible ☐ • Distance ca. …....………. m
Own DECT cordless phone ☐ • ECO+ ☐ • Own Wi-Fi ☐

Measured with ☐ **Broadband RF meter** ☐ **Spectrum analyzer** Type ……………………..
Typ …………………………… …………….. Meter/analyzer last tested on ..………………………

Values in µW/m²

Total range	*Sum*
27 – 2,500 MHz	
800 – 2,500 MHz	
…… – ….. MHz	
Radio service	*Sum of RS*
UKW	
DAB+ (VHF)	
TETRA	
DVB-T	

Radio service	*Sum of RS*
ISM 433	
ISM 863	
LTE 800	
LTE 900	
GSM 900	
DAB 1500	
GSM1800	
LTE 1800	

Funkdienst	*Sum of RS*
DECT 1880	
UMTS 2100	
LTE 2100	
LTE 2600	
WLAN 2.4	
WLAN 5.5	
Radar	
………… MHz	

Code no.:________________________ Name of technician:______________