

Report 2016 of Activities in the field of EMF in Germany

1. Legislation (ELF and EMF)

Legal regulations on EMF and ELF are defined in the Twenty-sixth Ordinance Implementing the Federal Immission Control Act (Ordinance on Electromagnetic Fields,). The recast entered into force on 22th August 2013 include in addition to the field limits precautionary measures for ELF.

- When erecting or significantly altering low frequency installations and direct current installations, the possibilities shall be exhausted to minimise the electric magnetic and electromagnetic fields generated by the respective installation according to the state-of-the-art, taking account of circumstances within the sphere of influence. Details shall be regulated by an administrative provision. (Section 4 (2))
- Low frequency installations for transmission of electricity with a frequency of 50 Hz and a rated voltage of 220 Kilovolt and more which are erected in a new path may not be erected over buildings or parts of buildings intended for the long-term presence of humans.

http://www.bmub.bund.de/fileadmin/Daten_BMU/Download_PDF/Luft/26_bimschv_en_bf.pdf

To substantiate the precautionary requirements according to section 4 (2) of the Ordinance on Electromagnetic Fields an administrative provision (Allgemeine Verwaltungsvorschrift zur Durchführung der Verordnung über elektromagnetische Felder – 26. BImSchVVwV) was set into force on the 4th of March 2016. The administrative provision enables competent authorities to promptly and conclusively assess whether minimization requirements pursuant to 26. BImSchV have been observed. The text you find in the attachment or under:

https://www.bundesanzeiger.de/ebanzwww/wexsservlet?session.sessionid=52b47c5c0dc85b72d37b048d2e17d595&page.navid=detailsearchlisttodetailsearchdetail&fts_search_list.selecte d=ad642922ca97ab14&fts_search_list.destHistoryId=15622

2. Research Activities

- International comparison of legal regulations concerning non-ionizing radiation protection of the general population

Part I: Electrical, magnetic and electromagnetic fields (0-300 GHz),

Part II: Optical radiation

This covers the enquiry, analysis and comparative assessment of the international regulations of non-ionizing radiation, as far as the latter affects the general public.

Within the scope of this project, data on the relevant legal framework of all European countries (47 countries, plus Germany) and major non-European countries (China, India, Australia, Japan, Canada, New Zealand and the USA) was collected, evaluated and compared. <https://doris.bfs.de/jspui/handle/urn:nbn:de:0221-2016021914007>

- Analysis of the public discourse on health impacts of high-voltage power lines

Extending the power grid in Germany poses issues of landscape, natural environment, health, and local economies and leads to a discourse on cognitive, emotional and aesthetic levels. For all these issues, recommendations geared to specific target groups can be drawn up. In this sense, a toolbox developed for professionals of the Federal Office for Radiation Protection provides a range of instruments for dealing with identified problems and situations within the conflict fields analysed in this study.

https://doris.bfs.de/jspui/bitstream/urn:nbn:de:0221-2016050414038/3/BfS_2016_3614S80008.pdf

Research projects ongoing:

- Follow-up of studies to "Tumor promotion in mice after ENU-initiation and exposure to UMTS" (Lerchl et al. 2015): 1. Dosimetric study, 2. Does UMTS enhance ENU-uptake or directly act as tumor promoting agent?