

Deutsche Telekom's EMF Guidance (Mobile Communications and Health)

High-frequency electromagnetic fields (EMF) transmit mobile voice and data and underpin mobile communications. The mobile networks of the Deutsche Telekom AG (DT) national companies are designed to ensure the electromagnetic fields are below the statutory limits and to safeguard reliable health protection. All Deutsche Telekom national companies that operate mobile networks adopted this EMF Guidance.

1. Transparency

- a. Comprehensive international guidelines are in place governing the exposure to electromagnetic fields. The International Commission on Non-Ionizing Radiation Protection (ICNIRP) is the competent international and independent scientific body that analyzes the technical knowledge relating to the risks of exposure to non-ionizing radiation and develops guidelines. According to statements from the ICNIRP, the limit values guarantee comprehensive protection for humans and the environment. In 2020, the ICNIRP reaffirmed its EMF protection concept detailing the use of electromagnetic fields when deploying mobile communications. This statement also applies to the frequency ranges used by 5G, as the high safety standards also apply here – as they did to previous networks.
- b. All mobile communications equipment operated by the Deutsche Telekom national companies meet the limit values stipulated by the particular governmental institutions. The ICNIRP limit values are implemented in the EU recommendation (1999/519/EC). On request, the national companies will issue a declaration of conformity confirming that a certain base station meets the particular applicable limit values. In some countries, the government agencies will provide this information.
- c. Deutsche Telekom is aware of the concerns expressed by some customers and stakeholders about possible adverse health effects of electromagnetic fields. The company respects the public interest in information on existing mobile communications transmitter equipment. Where national agencies provide public databases that store data on base stations of all mobile operators, the national companies support these databases. This information is, however, subject to national and European data privacy provisions as well as to the respective national legislation on the mobile communications infrastructure. The term “base station” refers to so-called macrocells. Nationally, agreements between government agencies and mobile operators set out whether the database will also include smaller network components such as small cells.
- d. The responsibilities and workflows for handling inquiries and complaints regarding EMF are stipulated clearly in the national companies and known throughout each company. Each national company itself determines the organizational responsibilities; here it is vital that the tasks and responsibilities for workflows are clear and effective in each company.

2. Information

- a. As part of its active communications strategy, Deutsche Telekom and its national companies provide the public and the agencies with information in the particular local language on “EMF and health” and “Development of mobile communications technology.”
- b. Deutsche Telekom’s annual Corporate Responsibility Report includes details of the latest developments relating to “EMF – Mobile communications and health.”
- c. The national companies are active members of national associations and initiatives of mobile operators that provide the general public and interested stakeholders with science-based information on mobile communications and health, technology development, and on cooperation with local government and other stakeholders.
- d. All mobile devices sold by the national companies must comply with the limit values for the specific absorption rate (SAR value) stipulated by the ICNIRP or the WHO. This value is 2 watts/kg.

3. Participation

- a. Besides companies and government agencies, local government is often the first port of call for local residents looking for information on planned or existing mobile communications equipment or base stations. It is therefore important that local government has the information it needs to answer questions from local residents. The national companies provide this information – insofar as relevant statutory frameworks, such as data privacy provisions, allows for such disclosure. Companies will also provide the necessary contact channels for customers and local residents approaching the company with questions.
- b. In line with the increasing use of mobile communications and thanks to the rollout of new generations of mobile communications, mobile operators guarantee the high-quality coverage that their customers expect from them. National companies must also fulfill the licensing requirements of government agencies. When building out their networks, the national companies use existing antenna locations, but also set up new base stations and small cells within the means at their disposal. Local government plays an important role when looking for the optimum location and can provide valuable information on possible locations.
- c. The national companies are keen on working with local government institutions to find the best possible location to provide their customers with optimum coverage and will – wherever possible – consider the interests of local stakeholders at each location.
- d. The national companies help implement Deutsche Telekom’s Corporate Responsibility strategy and endeavor to minimize the relevant environmental impact of the mobile networks as far as possible. They are ensuring compliance with country-specific

environmental and nature conservation regulations. New base stations must fit into the existing mobile network – where expedient from a wireless technology and economic perspective, companies use existing buildings, their own existing locations, or locations run by other operators. This approach ensures that customers enjoy optimum mobile coverage and the impact on the environment is minimized wherever possible.

4. Scientific facts

- a. Over the past few decades, the effect of electromagnetic fields on health has been the subject of in-depth scientific research. Deutsche Telekom therefore continually monitors scientific research developments and uses the Group's website to provide the public with information on new scientific risk assessments from expert committees such as the ICNIRP and recognized specialist bodies.
- b. The national companies find out about the very latest research on "EMF and health" and tailor their communications to the scientific facts and recommendations from international and national expert committees. The companies do not comment on individual studies, but refer to the overall scientific picture developed by the national and international expert committees.
- c. Given the constant global developments in mobile communications technology and the uptake of this technology, the national companies regard continuous monitoring of new scientific research as a key risk assessment measure. The scientific research takes its lead from the research agenda of the World Health Organization (WHO) and the research programs of national agencies.

*Approved by the Corporate Responsibility Board
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