



# T-Mobile EMF-Policy Health and Electromagnetic Fields Background Document

## Introduction

The T-Mobile EMF Policy Recommendations are advised to T-Mobile companies, this includes to date: T-Mobile Austria, T-Mobile Czech Republic, T-Mobile Germany, T-Mobile Netherlands and T-Mobile UK.

## Transparency

1. The responsibilities and workflows for the management of complaints and enquiries need to be clearly established and recognized throughout the company. The departmental structure for the responsibilities shall be determined by each subsidiary independently; essential is that the tasks and responsibilities for workflow and coordination within the company be clear and effective.

2. T-Mobile acknowledges and respects the public's interest in relevant environmental information. Therefore, T-Mobile supports the idea of national databases of base stations of all mobile operators as a contribution to comprehensive databases that include all other sources of radio frequency EMF emissions in order to ensure the availability of relevant information to all interested persons. This information is subject however to national and European data protection rules and all national legislation regarding mobile communications infrastructure.

The term "base station" refers to so-called macro cells. National agreements between government authorities and the mobile network operators will determine whether smaller components of the networks, such as micro cells, are included in the database.

3. Comprehensive international guidelines exist governing exposure to radio waves. International Commission on Non-Ionizing Radiation Protection (ICNIRP) is an international independent scientific organization that provides guidance and advice on the health hazards of non-ionizing radiation exposure. Its guidelines are endorsed by the World Health Organization (WHO) and the International Labor Organization (ILO). Guidelines developed by ICNIRP are based on a careful analysis of all scientific literature (both thermal and non-thermal effects) and offer protection against all identified hazards of radio frequency energy with significant additional precautionary margins. ICNIRP compliance refers to T-Mobile only sites and those shared with other operators.

T-Mobile provides upon request declaration of compliance that individual base stations operate within the ICNIRP guidelines. In some T-Mobile countries this information is provided by government authorities. Future EU legislation based on the European Committee for Electrotechnical Standardization's (CENELEC)<sup>1</sup> Putting into Service Standard will also include this requirement for all network operators in the EU.

## Information

4. As part of its proactive communications strategy T-Mobile's national subsidiaries provide information material in their national language on health and mobile communications to the public and government authorities in print and

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<sup>1</sup> CENELEC is a non-profit technical organization whose mission is to prepare voluntary electrotechnical standards that help develop the Single European Market/European Economic Area for electrical and electronic goods and services

electronic forms. In addition T-Mobile is an active member of national mobile operators associations which also provide information on mobile communications and health to all stakeholders.

5. All mobile phones that T-Mobile sells have to meet international radio frequency exposure guidelines set by ICNIRP, which also include a substantial precautionary safety margin. All technical information regarding these SAR values is provided by the handset manufacturer. T-Mobile makes this information available to the public as a service to the consumer. The exposure standard for mobile phones employs a unit measurement known as the Specific Absorption Rate (SAR), which is the unit of measurement for the amount of radio frequency energy absorbed by the body when using a mobile phone.

Although the SAR is determined at the highest certified power level in laboratory conditions, the actual SAR level of the phone while operating is usually well below this value. This is because the phone is designed to use the minimum power required to reach the network (dynamic power regulation). Therefore, the closer you are to a base station, the more likely it is that the actual SAR level will be lower. Variations in SAR do not mean that there are variations in safety.

## **Participation**

6. In many cases the local authority will be the first point of contact for members of a community seeking information on either a proposed or an existing base station.

It is important that the local authority has all the relevant information to enable them to answer queries from the public. T-Mobile provides that information. In addition, T-Mobile will make available contact details of relevant personnel within the company should there be further questions – as per recommendation 1.

There will be some information which T-Mobile cannot make available, e. g. details of the landlord, full site address and lease arrangements. These are confidential matters and are subject to national and European data protection regulations.

7. As the number of mobile phone users continues to grow and with the introduction of third generation technology, mobile operators need to ensure they continue to provide the high quality coverage customers expect. To achieve this it can be necessary to increase the number of antennae. In developing its network T-Mobile makes maximum use of existing sites.

Local authorities play an important role in the siting process and can provide valuable information with regard to potential locations and design of mobile phone base stations. They can also provide useful advice relating to community organizations which should be consulted before developing any base station. T-Mobile is keen to work with local authorities to endeavor to find the optimum location for its customers whilst minimizing any potential impact on a community.

8. T-Mobile has a firm commitment to the environment and aims to minimize the visual impact of its base stations. Wherever possible, T-Mobile will seek to use existing structures, its own base station sites or those owned by other operators. This co-operative approach ensures customers receive these new services whilst reducing environmental impact.

When a new mast is required we do try to reduce the impact on the local environment by appropriate siting.

## **Promotion of science**

9. Mobile telephony is a new application of an existing technology – that is, the use of radio waves to carry information. Radio waves have been in commercial use for more than 70 years and in that time, there have been thousands of pieces of scientific research into potential effects on human health. International radio frequency exposure guidelines set by ICNIRP have been based upon the results of this research.

As a precautionary measure, T-Mobile as a group fully supports continuing research in this field and contributes to independent research programs. Independent research ensures the mobile operators do not have any bearing on the

research focus or results thus lending further credibility to such programs and reassurance in both the public and political arenas.

10. To ensure the health and safety of both mobile phone users and those working and/or living near mobile phone base stations is protected, T-Mobile strongly believes limit values for EMF should be kept under constant review.

Certain conditions are important in lending credibility and authentication to research. Scientific papers must be peer-reviewed as a quality control conducted by a number of experts and reproducible by independent third parties using identical methodology and conditions. T-Mobile believes guidelines should continue to be based on such substantiated research.

Furthermore, to ensure T-Mobile is fully informed of the latest position, we will continue to undertake an evaluation of new scientific findings.

Approved by Executive Management Board of  
T-Mobile International AG & Co. KG on  
10<sup>th</sup> March 2004