

Mobile communications guideline for cities and municipalities



EBP created its "Mobile Communications Guideline" to provide public agencies with a comprehensive reference work for use in the development and management of their communications systems. The guideline includes examples that illustrate approaches to selecting base station and mobile communication tower sites.

The task of managing competing interests

Development and planning agencies face major challenges today in connection with the development of their mobile communications systems. They often find themselves confronted by the task of managing the many competing interests, including interests relating to environmental protection, zoning laws and the aim of mobile communications providers to secure technically faultless operation. Such conflicts can also gain considerable public attention as interest groups demand protection against non-ionizing radiation or the preservation of landscapes and cityscapes.

The "Mobile Communications Guideline" helps agencies to manage these competing interests. For instance, the Guideline shows how planning agencies make decisions on site selection and secure optimal service provision while at the same time maintaining compliance with applicable emission thresholds.

Securing optimal mobile communications services

Planning mobile communications systems requires a thorough understanding of the technology involved and the criteria for optimal service provision, including the preferred locations for

Client

Swiss Federal Office for the Environment (FOEN), Swiss Federal Office of Communications (OFCOM), Swiss Federal Office for Spatial Development (ARE)

Facts

Period 2007 - 2010
Project Country Switzerland

Contact persons

Judith Hauenstein judith.hauenstein@ebp.ch

Oliver Blank oliver.blank@ebp.ch

base stations. The aim is often to provide proper services to an increasing number of users. Transmission quality is to be improved and network instabilities eliminated. Mobile communications base stations need to be built in locations where the volume of mobile-device use is high. This is why most transmitters are set up in densely populated areas.

Statutory limits to ensure electromagnetic field safety

Network operators are required to demonstrate compliance with the emission thresholds outlined in the Swiss Ordinance for Protection against Non-ionizing Radiation in the context of obtaining building permits. The exposure limit values need to be adhered to at all accessible locations. Moreover, strict installation limit values apply in Switzerland to sensitive areas such as in the vicinity of residential buildings, office buildings, school buildings and playgrounds. Compliance with the thresholds is monitored and enforced by measuring emissions at the relevant sites and using the results as a condition for operation.

Site selection

In addition to clarifying environmental issues, the Guideline provides answers to other legal questions relating to mobile communications, ranging from telecommunications law to planning and zoning law. The Guideline also outlines the ways in which municipalities can use planning instruments to determine the location of mobile communication towers and antennas. Moreover, it offers an in-depth look at all procedures for obtaining building permits. The Guideline concludes with instructions for effective public relations, which can naturally play a major role when it comes to public acceptance. Partner: The Guideline was drafted together with Benjamin Wittwer (Zürich).