

Radio waves and health

Bluetooth

Bluetooth® is a short-range radio technology used to connect electric devices without wires. It uses very low output power, and the radio wave exposure levels are well below established safety limits.



Bluetooth® is the name for an international standard, which makes it possible to use short-range wireless connections between mobile phones, laptops, printers, headsets, cameras and many other devices at home or at work. With Bluetooth wireless technology, cables are replaced by radio communications. Bluetooth products contain small radio transmitters and receivers using the same type of radio waves as, for example, broadcast radio, television and mobile phones.

The power from Bluetooth transmitters is normally very low, only 1 mW (one thousandth of a watt), which gives a working range of about ten meters. Bluetooth uses a global frequency band around 2.45 GHz, also used by, for instance, remote controls, garage door openers, security alarms and wireless computer networks.

Independent expert organizations have established exposure limits for radio waves, based on many years of

research. These limits include large safety margins. The World Health Organization (WHO), among others, recommends exposure limits that are adopted by national authorities. Research continues in an effort to expand the knowledge of possible effects of radio waves on humans. Ericsson, along with other companies, supports independent research in this area.

The maximum exposure levels from Bluetooth products are well below the prescribed safety limits. Normal Bluetooth devices (1 mW) reach one hundredth of the safety levels at the most. The risk of Bluetooth devices causing electromagnetic interference in sensitive electronic equipment, for example medical devices, is minimal because of the very low output power.

For more information, visit <http://www.ericsson.com/health>