

The MOA logo consists of the lowercase letters 'moa' in a white, sans-serif font, positioned inside a dark blue, teardrop-shaped graphic that points towards the top right.

moa

mobile
operators
association

responsible
network
development

Public Exposure Guidelines for Mobile Phone Base Stations

What are they?

There are now more than 62.5 million mobile phones in use in the UK. This number increases each day. However, alongside this growth there is some community concern about exposure to radio waves from base stations (commonly called 'masts').

To date, the balance of evidence from research suggests masts pose no health risk to the general population. International health and safety guidelines are in place to limit public exposure to radio waves from base stations and mobile phones, and are set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). Fully adopted by the UK's five mobile phone network operators, these guidelines provide protection against known adverse health effects.

What is ICNIRP?

ICNIRP is an international independent scientific organisation that provides guidance and advice on the health hazards of non-ionizing radiation exposure. Its guidelines are endorsed by the World Health Organisation (WHO). Protection against the adverse health effects of non-ionizing radiation is a broad field demanding knowledge of many scientific disciplines. ICNIRP's aim is to bring together independent experts to provide advice on the health issues relating to non-ionizing radiation exposure.

The ICNIRP guidelines are based on an analysis of all relevant scientific literature, including both thermal and non thermal studies.

Mobile phones cannot work without a network of base stations in places where people want to use them.

No less than 30 scientific reviews worldwide in the past five years have not found adverse health effects caused by mobile phone base stations operating within the international health and safety guidelines used in the UK.



How do the guidelines work?

Radio waves are electromagnetic energy. It is established that such energy can lead to the heating of the body, but radio waves do not have enough energy to damage cell structures and are therefore known as 'non-ionizing'. Scientific research has led to the conclusion that a temperature rise of no more than 1 degree celsius is a safe level for the body to cope with. The guidelines ensure this level is not exceeded – and the guidelines include a substantial safety margin for limiting public exposure.

When were they set?

The National Radiological Protection Board (NRPB) now part of the Health Protection Agency (HPA) had previously set the national guidelines for the UK. In May 2000, the Independent Expert Group on Mobile Phones – chaired by Sir William Stewart – concluded that the evidence to date suggests that exposure to radio waves below the guidelines do not cause adverse health effects to the general population.

However, the Stewart Report called for a precautionary approach and recommended that this should include adopting the ICNIRP guidelines in the UK. The ICNIRP limits for exposure for the general public are based on the same science as that used by the NRPB, but have an additional precautionary factor built into them. The NRPB Report in January 2005 endorsed the use of the ICNIRP guidelines.

Who complies?

Immediately following publication of the Stewart Report in May 2000, the mobile network operators ensured their sites complied with the ICNIRP public exposure guidelines. With every planning application for a new base station, the operators provide a certificate declaring the proposed site will be ICNIRP-compliant.

This was a key point in the operators 'Ten Commitments to best siting practice', launched in August 2001 to ensure transparency in building mobile phone networks, to provide more information to the public and local planners and to boost the community's role in the siting of base stations. These can be found at: www.mobilemastinfo.com. All existing base stations meet the ICNIRP public exposure guidelines and all new base stations are built to this standard.

National audit

In May 2000, the Government asked the Radiocommunications Agency (now part of the Office of Communications, Ofcom) to conduct a national audit of base station emissions to confirm they comply with ICNIRP guidelines. The surveys, which began in December 2000, have shown that even maximum levels of exposure are a small fraction of the guidelines. Random audits will continue and the results are available on the Ofcom website (www.ofcom.org.uk).

The Mobile Operators Association represents the interests of the UK's five mobile phone network operators - 3, O2, Orange, T-Mobile and Vodafone - on radiofrequency health and associated planning issues.

For individual operator contact details see www.mobilemastinfo.com

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