

# Small Cells

## Keeping your community safe

This guide will help dispel 5G myths, provides information on radio frequency (RF) safety and explains how we conform to ICNIRP protection standards. It also introduces our Community Relations team and provides links to industry regulators.

# Cellnex Responsibilities

Cellnex and all operators of radio equipment are responsible for ensuring that we are compliant with the International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines. The ICNIRP guidelines are designed to safeguard all members of the public of all ages and in all states of health.

The important thing about ICNIRP guidelines approach is that they are based upon peer-reviewed and published research, spanning many decades. The guidelines are constantly reviewed. See the updated publication [here](#).

## EMF Compliance - What we do

Cellnex is committed to complying with all relevant government requirements and guidance in terms of electromagnetic field (EMF) exposure. In summary, this means we comply with:

- Control of EMF At Work Regulations, 2016 (CEMFAW) for occupational exposure.
- Guidance from the International Commission on Non-Ionising Radiation Protection (ICNIRP) for public areas.
- Assessments are based on information provided by the operators as follows:
  - Services are assumed to operate at full power at all times.
  - All antenna tilts/directions are taken into account.
  - Cumulative effect of all antennas from a site is assessed.
  - We work to 80% of the ICNIRP Reference Level for the public. i.e. The compliance zone boundary is drawn where the level falls to 80% rather than 100% of the reference levels. (An analogy is like making sure you only drive at 40mph in areas where the speed limit is 50mph)

# Health and Safety

Small cell antenna systems are small scale, low frequency and very low powered apparatus that provide very localised mobile coverage and capacity for the mobile networks. Due to their small scale and low power, they can be sited on public street furniture or from purpose-built relatively low height street pole masts.

Small cell antennas have to comply with the International Commission on Non-Ionising Radiation Protection Guidelines (ICNIRP) which relate to the protection of humans exposed to radiofrequency electromagnetic fields (RF) in the range 100 kHz to 300 GHz. These guidelines cover many applications such as 4G and 5G mobile technologies used in small cell systems. Small cell antennas emit radio waves which produce 'non-ionising radiation' and hence are covered by these guidelines.

To meet ICNIRP guidelines and ensure public safety, there is an exclusion zone that is designed and maintained around these small cell antennas where the general public or occupational workers are not allowed to enter or remain for protracted periods of time (latter for occupational workers). The safety of mobile communication base stations and antennas (both small cell antennas and larger antennas) are explained more in the following links:

- **Ofcom** has extended its programme measuring EMF emissions from equipment used to transmit mobile signals and other wireless services to cover the frequencies being used for 5G. Further information can be found [here](#).
- More information from the **World Health Organisation** can be found [here](#).
- **Cancer Research UK** advises on health myths and can be found [here](#).

# A guide for Local Authorities

UK5G consultations have shown that local authorities are a key audience for helping to counter anti-5G sentiment, when members of the public have concerns around 5G. What's more, research from Mobile UK indicates that local authorities are seen as trusted sources of information.

## 5G Safety & Related Resources

You'll find here guides and articles which explain very clearly what 5G is (and what it isn't) as well as information about EMF readings gathered throughout the UK and practical how to guides for local authorities; these can be used to overcome any misconceptions people may have. We want to support you in being able to provide clear, informative responses to specific objections that help the public understand the level of associated risk. The tools found here will help you to do exactly that.

To request a copy of any of the below please email [5Gsafety@uk5g.org](mailto:5Gsafety@uk5g.org)

- **5G Safety Messaging Document:** A messaging document, created by UK5G, to help you communicate with communities and businesses who may have questions or concerns around 5G. This document has been based on consultations with local authorities and projects who are deploying 5G as well as experts from the fields of telecoms, engineering, epidemiology and psychology.
- **5G 'cheat sheet' for Local Authorities:** A simple clear asset, to help you access the most appropriate resources to answer questions from your communities.
- **FAQ guide for Elected or Planning Officials:** A frequently asked questions guide for elected or planning officials, featuring questions submitted by various local authorities across the UK.
- **How To Guide: 5G Freedom of Information Requests:** A practical guide, to help local authorities respond to FOI queries relating to 5G. Featuring sample FOI requests submitted by various local authorities across the UK.

# More Resources

## Other helpful resources that can be referred to

- **Ofcom's** recent EMF emission measuring research across the UK
- **MVG Whitepaper** with Bourges EMF emissions research
- **BBC Click** featured a show in November 2019 on the impact of 5G including EMF measurement
- **5G mobile technology: a guide**: Produced by UK Government and Ofcom, explains the facts about 5G to help you deal with queries from the public and to combat online disinformation.
- **5G EMF Readings**: Read about Ofcom's EMF consultations, statements, technical reports of EMF readings across the UK and how they're ensuring spectrum users can demonstrate compliance to ICNIRP guidelines.
- **Allaying health concerns regarding 5G and exposure to radio waves**: An IET guide for policy makers and local planning authorities.
- **Mobile UK: Local Authority Guide**: Mobile UK have created a guide for councillors and officers to use as required to help explain 5G to constituents.
- **Everything you need to know on the 5G-powered future (WHICH)**: Find out more on 5G speeds and its impact on autonomous cars, healthcare and the cities of the future.

# Our Community Relations team



Cellnex UK is the country's largest independent owner and operator of wireless telecoms infrastructure. Every day, we help connect a growing and evolving digital society in the UK, enabling socio-economic growth, business productivity and more sustainable communities.

At Cellnex UK we want to give our stakeholders peace of mind and help support any engagement with the public. That's why we have a dedicated Community Relations team to create community trust and increase transparency around our operations. We know that members of the public sometimes have questions about our infrastructure. Our Community Relations team will manage these interactions engaging with local communities, site providers, local media, and other stakeholders, to address any matters that may arise.

We offer guidance to local authorities, briefings to council members and partner with various community foundations working to reduce digital inequality across the UK.

[Contact our CR team](#)

[Find out more](#)