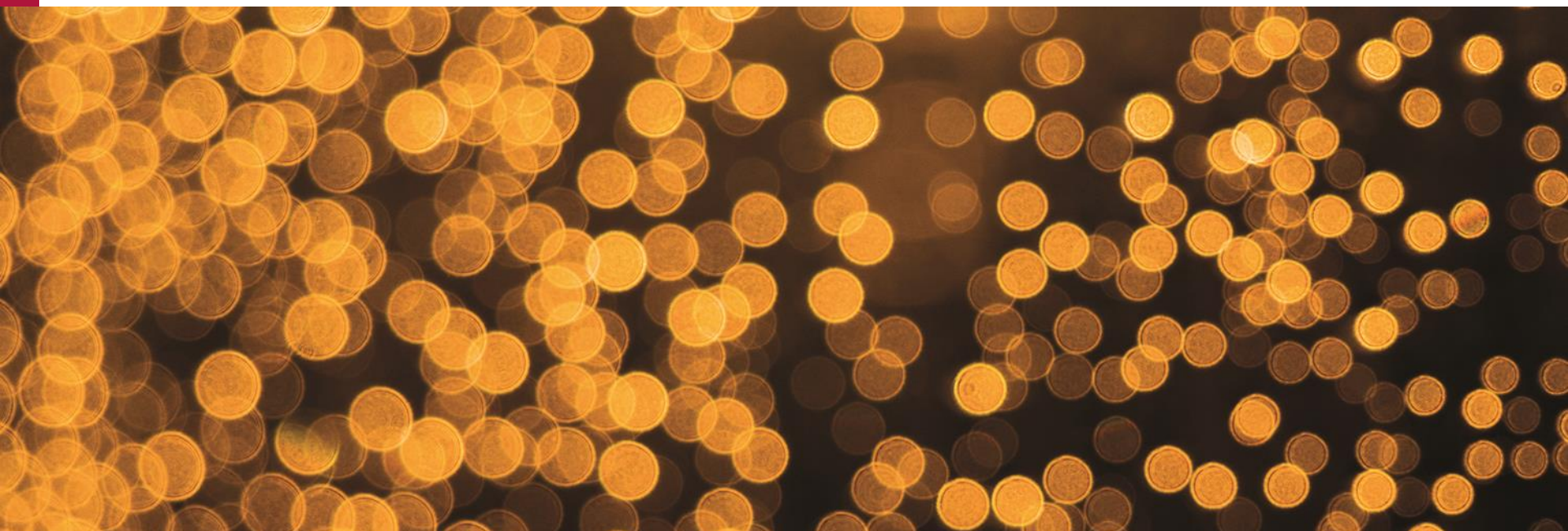


5G implementation: EMF and other challenges

Martin Fenton, Director of Spectrum Analysis

23 October 2020



What Ofcom is doing

We carry out EMF measurement audits and publish factual information about emissions. We are adding a condition in spectrum licences requiring compliance with ICNIRP Guidelines. We respond to misleading information in the media. We sanction TV and radio broadcasters who breach our rules.

However, we are not public health experts and we rely on the advice of the recognised public health authorities.

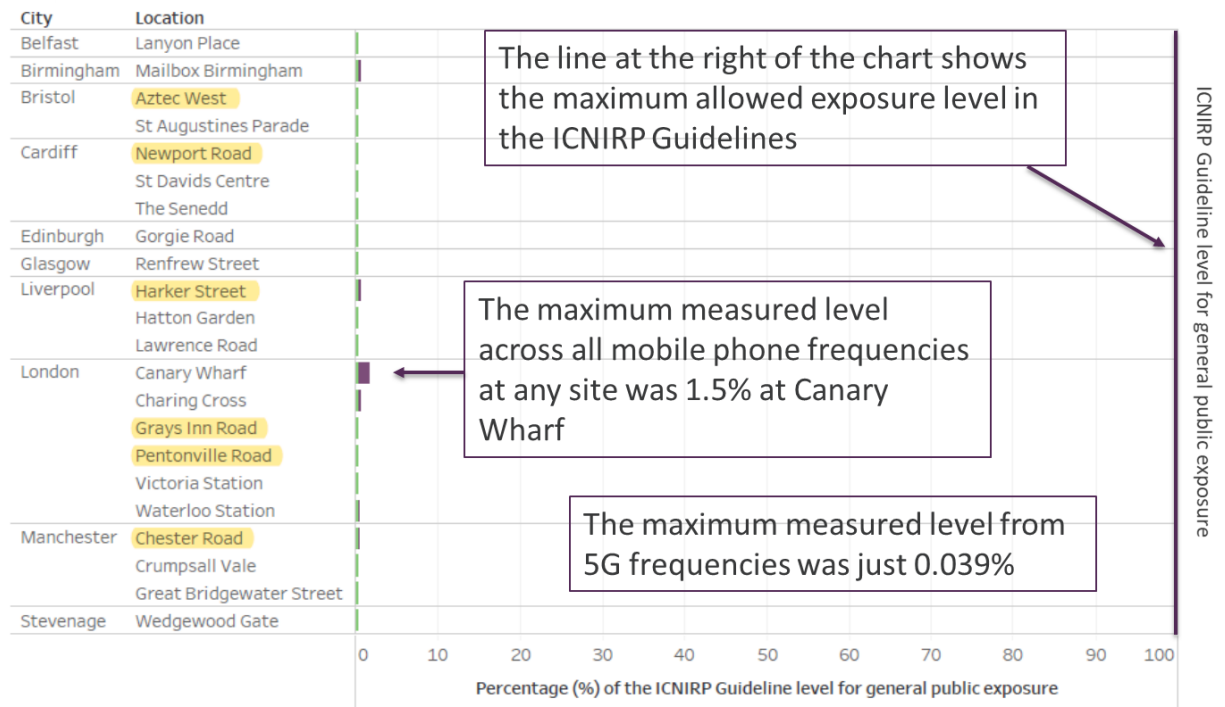
Public Health England (PHE) is the lead UK authority on public health matters associated with EMF.

PHE's advice is that EMF emissions should comply with the ICNIRP Guidelines and on 5G, their view is that *"the overall exposure is expected to remain low relative to guidelines and, as such, there should be no consequences for public health"*.



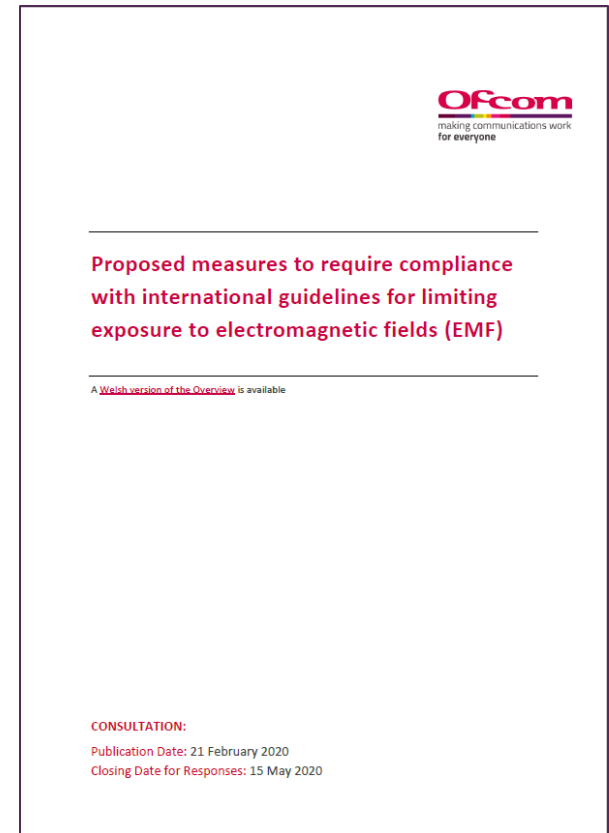
EMF measurements near 5G base stations

- We have been carrying out measurements near 5G-enabled mobile phone base stations.
- Prior to the COVID-19 lockdown, we measured EMF emissions at 22 locations in 10 cities across the UK, including Belfast, Cardiff, Edinburgh and London, focusing on areas where mobile use is likely to be highest, e.g. train stations, shopping centres, etc.
- We have restarted our measurements and expect to publish further results before the end of the year.



Adding conditions to spectrum licences to require compliance with ICNIRP general public levels

- We published a consultation in February proposing to include a new condition in spectrum licences (for powers above 10W EIRP) to require compliance with the ICNIRP Guidelines.
- In October, we published a statement setting out our decision to proceed with this proposal. We are now consulting further on the detailed wording of the condition and on guidance for licensees. We will amend licences in the first half of 2021.
- This is not specifically about 5G but because we want to make sure all spectrum users in the UK are taking into account the ICNIRP Guidelines when installing or using radio equipment.



Providing information on 5G Technology and EMF



HM Government

5G mobile technology: a guide

5G is the latest mobile technology. It brings greater speed, capacity and functionality to mobile services, opening up new opportunities for consumers, businesses and public services.

Companies have been rolling out 5G in the UK since 2019. However, some people have raised concerns that the introduction of 5G could affect people's health and have even linked it to the coronavirus pandemic.

These claims are completely unfounded and should not be used as a basis to block or delay 5G rollout.

This guide explains the facts about 5G to help you deal with queries from the public and to combat the disinformation that is spreading online.



We recently published a guide to 5G technology for local councillors and planning departments providing information of 5G and EMF and rebutting claims linking 5G to the Coronavirus pandemic

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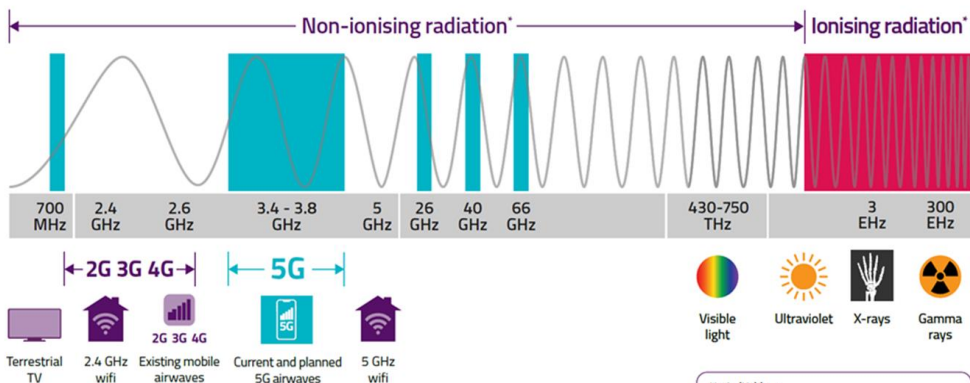
https://www.ofcom.org.uk/__data/assets/pdf_file/0015/202065/5g-guide.pdf

Responding to misleading information in the media



There is no scientific evidence to support the conspiracy theories linking the coronavirus to 5G and putting lives at risk.

Today we've released more test results showing that UK 5G continues to operate well within internationally-accepted safety levels: [ofcom.in/5GCovidMyth](https://www.ofcom.gov.uk/consult/condocs/5g/5gCovidMyth/)



*Radio frequencies needed for common household items to work, from televisions to microwave ovens (usually between 3KHz and 300GHz), produce radiation which is classed as 'non-ionising'. This means that it does not have sufficient energy to break chemical bonds or remove electrons, as opposed to 'ionising radiation', which occurs at much higher frequencies and is generally considered to be hazardous to humans. (Source: International Commission for Non-Ionizing Radiation Protection (ICNIRP))

Sanctioning TV and radio broadcasters who breach our rules



The
Guardian

TV station's interview with David Icke
'posed threat to public health'

Ofcom acts over London Live segment in which Icke claimed
pandemic was a cover story

**Coronavirus: Christian TV channel sanctioned
by Ofcom after falsely linking 5G to pandemic**



INDEPENDENT



BBC
NEWS

Broadcasting watchdog Ofcom has "issued guidance" to
ITV following Eamonn Holmes' comments about 5G
technology and coronavirus on This Morning.