

Title of Report: Electromagnetic Fields from 5G Base Stations	Officer Presenting: Director of Health and Community Author: Head of Health and Community Wellbeing
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1 Purpose of Report/Recommendations

- 1.1 To update members on the results of an Ofcom survey of Radio Frequency Electromagnetic fields (RF EMF) following an audit of a number of 5G base stations located across the UK.

2 Background

- 2.1 As members are aware a number of videos have recently been posted on YouTube alleging that there are dangerous emissions from a number of mobile phone base stations located in the Council area. These videos which have been circulated through social media have caused considerable concern in the local community.

3 Key Issues

- 3.1 The Department of Health and the Public Health Agency have a memorandum of understanding with Public Health England (PHE) which includes arrangements for the provision of specialist technical advice on a range of matters, including radio frequency electro-magnetic fields (RF EMF) from mobile network technologies.
- 3.2 The current advice from the UK Government is that, while there may be a small increase in overall exposure to radio waves when 5G is added to an existing network or in a new area, the overall exposure is expected to remain low relative to guidelines and, as such, there should be no consequences for public health.
- 3.3 Ofcom the national regulator, has measured RF EMF emissions at 16 5G sites in 10 cities across the UK, focusing on areas where mobile use is likely to be highest. The purpose of the measurements was to verify that 5G-enabled mobile base stations remained within the EMF limits set out in the Guidelines from the International Commission on Non-Ionizing Radiation Protection (ICNIRP).
- 3.4 Details of the measurements taken at the 5G base stations are outlined in the technical report published in February 2020 (see Appendix 1).

- 3.5 The report indicates that for those sites audited the measured RF EMF levels from 5G-enabled mobile phone base stations are at below the levels identified in the ICNIRP Guidelines.
- 3.6 Council officers have also brought the YouTube videos to the attention of Ofcom in Northern Ireland and have also enquired if Ofcom are in a position to undertake reassurance monitoring to give wider public reassurance that electromagnetic fields from the specific base stations detailed in the videos are well within the ICNIRP guidelines on public exposure and do not pose a risk to health.
- 3.7 Ofcom in Northern Ireland has confirmed that it has the capability to carry out an audit of mobile phone base stations on request. These audits attract a charge unless the request relates to a local school or hospital located close to a particular base station.
- 3.8 The Principals of schools within the Council area have been advised on the Ofcom survey and the opportunity to have RF EMF levels measured at 5G base stations located close to their schools by Ofcom on request.

4 Financial, Equality, Legal, HR, Improvement, Rural Needs and other Implications

- 4.1 Elected members may wish to consider making a request to Ofcom to measure RF EMF strength at base stations located at Glengalliagh Road and Strand Road which will cost approximately £1,000 for each site.

5 Recommendations

- 5.1 Members to consider the contents of the above report.

Background Papers

Appendix 1: [Ofcom "Electromagnetic Field \(EMF\) measurements near 5G mobile phone base stations" Technical Report Publication Date: 21 February 2020 \(updated 17 April 2020\)](#)

[Mobile phone base stations: radio waves and health -Public Health England](#)

[5G technologies: radio waves and health](#)

Mins Refs: HC101/20; HC201/19