

I am a local resident with a pace-maker and wish to file my objection having just been informed of this application.

"Would the case officer please obtain and provide the technical details for the proposed apparatus? Specifically, this should include the **power output (dBm)** of the **non-isotropic 5G antenna** and the **power drop-off rate** relative to the ICNIRP limit of **1mw/cm<sup>2</sup>**. This information is necessary to address recent court rulings suggesting that ICNIRP guidelines may not fully account for individuals with **pacemakers or metal implants**, whom the Council is responsible for safeguarding.

"While **4G** and earlier generations follow the **Inverse Square Law**—where isotropic radiation drops in intensity relative to the square of the distance—**5G** operates differently. Because 5G utilizes **non-isotropic, directed energy** to focus radiation into concentrated beams, the standard calculation for exclusion zones used for 4G is no longer applicable. Consequently, the Council must evaluate the specific beam-forming characteristics of this 5G apparatus rather than relying on isotropic dispersion models."

"The practical challenges are significant; even **Ericsson**, a leading 5G manufacturer, has stated that the required **exclusion zones** for ICNIRP compliance could make network roll-out 'a major problem or impossible.' This admission suggests that creating a zone large enough to maintain a **1mw/cm<sup>2</sup> power density** at its boundary would be physically or logistically unfeasible in most settings.

"To comply with **ICNIRP** standards, the Council must ensure the applicant's **5G antenna design** allows for sufficient power drop-off, ensuring that **power density** at the edge of the **exclusion zone** does not exceed the limit of **1mw/cm<sup>2</sup>**.

"Without this specific technical data, the Council cannot independently verify that the proposed antenna array complies with the **ICNIRP 1mw/cm<sup>2</sup>** limit. A standard **ICNIRP certificate** is an insufficient substitute for this verification, as it typically lacks the precise **power density** and **distance-based drop-off** calculations required for this specific apparatus."

Given that the Council is now aware of these technical requirements, it follows that in the absence of specific **power drop-off data**, the application lacks the necessary evidence to demonstrate **ICNIRP compliance**. Consequently, the application should be **refused**.

"As established in **Judge Jarman's ruling**—subsequently upheld by the **Court of Appeal**—individuals with **metal implants or pacemakers** fall outside the scope of **ICNIRP guidelines**. Consequently, the Council is required to conduct a formal **consultation** with all residents living near the proposed mast. To be legally robust, this process must adhere strictly to the **Gunning Principles**."

Under the **Gunning Principles**, the Council must ensure that the consultation provides residents with sufficient information to make an 'intelligent response.' This includes explicitly informing the public that while the Council relies on **ICNIRP guidelines**, these standards do not account for certain vulnerable groups, such as those with **medical implants**. Furthermore, given **Ericsson's** statement regarding the unfeasible size of required exclusion zones, the scope of this consultation should logically extend to all residents within the Council's boundary to ensure full procedural fairness."

"Furthermore, **Nokia**, another major supplier of 5G infrastructure, has stated that a single **5G mast** can provide coverage across hundreds of square miles. Given the **technical complexities** and potential health implications for vulnerable groups over such an extensive area, the Council cannot fulfill its **duty of care** without the specific power density data requested. Consequently, the application must be **refused**

The MHRA guidance titled "Medical devices: sources of electromagnetic interference" identifies radiofrequency sources as potentially causing malfunctions in active implanted medical devices like cardiac pacemakers and insulin pumps, including asynchronous pacing, inhibition of therapy, and inappropriate therapy. The guidance notes that interference risk is influenced by transmitter power and distance, and recommends risk assessments before using high-power RF technologies near individuals with sensitive medical devices. Read the full guidance at [gov.uk](https://gov.uk).

The ICNIRP guidelines, such as the 2010 [ICNIRP Guidelines PDF](#) and 2020 [ICNIRP Guidelines PDF](#) versions, explicitly state that compliance does not prevent interference with medical devices. Such interference can occur below the recommended reference levels, and guidance on avoiding these issues is considered outside the scope of the document

The ICNIRP recommendations were adopted by the EU in its Council Recommendation of 1999, without considering long-term non-thermal effects. However, it should be stressed that at an international EMF conference in London (2008), Professor Paolo Vecchia, ICNIRP Chairman from 2004 to 2012, said about the exposure guidelines "What they are not": "They are not mandatory prescriptions for safety", "They are not the 'last word' on the issue", and "They are not defensive walls for industry or others."

Lloyd's of London syndicates utilize "Exclusion 32" to exclude coverage for claims arising from electromagnetic radiation, treating it as a long-tail liability risk analogous to asbestos. Similarly, Swiss Re's 2019 SONAR Report categorizes 5G and EMF as a "High" impact risk due to potential long-term health effects, comparing it to asbestos and lead.

### **The Insurance Industry won't touch it, and these experts specialise in risk.**

The supporting marketing material is full of inaccuracies such as ICNIRP covers both thermal and non-thermal effects. Hardly reassuring or persuasive as even the Industry itself over 22 years ago in 2004 in the **Swisscom AG patent application WO2004075583A1** disclosed the carcinogenic nature of the associated EMF/RF radiation. "When, for example, human blood cells are irradiated with electromagnetic fields, clear damage to hereditary material has been demonstrated. and there have been indications of an increased cancer risk." It references studies showing that mobile phone radiation can damage genetic material (DNA and chromosomes) in human white blood cells. This document notes that such damage is a **non-thermal effect** that "can consequently lead to increased cancer risk.

"The Council should look beyond the applicant's marketing materials and instead examine the official **shareholder risk disclosures** from providers such as **BT (EE)**. In these mandatory filings, the industry acknowledges that potential health concerns and future changes in safety standards represent a significant **litigation and financial risk**—a stark contrast to the categorical safety assurances provided in this planning application."

While the applicant's planning documents for **DM/26/0328** claim the installation is entirely safe, their own financial disclosures to shareholders tell a different story. **BT (EE)** admits in its annual reports that it cannot provide 'absolute assurance' against links to cancer or interference with pacemakers. Furthermore, **Crown Castle**—a major industry infrastructure provider—explicitly warns investors that they have no significant insurance for health-related RF claims. If these companies are warning their own backers that the risk is high enough to be a 'material threat' to their business, the Council must explain why it considers the risk low enough to impose on local residents.

Finally, this leads to the matter of legal and professional liability, I strongly recommend that the Council seeks independent legal advice regarding its specific obligations in this case. At the BHTC meeting on 8 December 2025, it was noted that councillors operate under a common law duty of care to their residents. To assist in your deliberations, please consider the following points regarding the Council's responsibility to safeguard the health and safety of the community.

The solicitor for the campaign group "Stop 5G Bath" received a letter from PHE's own solicitors, DLA Piper, (dated 08-Aug-2019) which exempted PHE from all liability in the event of future legal action relating to health effects from 5G if their guidance should turn out to be incorrect or misleading. In this letter they state: "A public body must determine how much weight to put on the PHE guidance. Equally that body must determine what other evidence from your client or other members of the public or interested parties to consider in making any decision. If it be alleged that a public body now or in the future acted unlawfully in placing reliance on the guidance, that cannot retrospectively taint the guidance with illegality."

PHE's lawyers advise public bodies to balance PHE's guidance with evidence from other sources i.e. not only from ICNIRP. This contradicts the government's own planning regulations which require local authorities to adhere strictly to ICNIRP's guidelines...This gives no choice to public bodies about accepting a potentially catastrophic risk.

It is notable that while public-facing materials often minimize these risks, industry leaders have historically acknowledged the potential for harm, as seen in the 2004 Swisscom patent and various shareholder risk disclosures. Relying solely on a narrow interpretation of the NPPF to dismiss these health and safety concerns ignores the broader evidentiary record. The Council must decide whether to accept standard industry assurances or to address the documented risks that manufacturers themselves have disclosed to their investors.

**Please note that Wera Hobhouse MP for Bath wrote a letter dated 27 February 2020 to DDCMS stating that anybody relying on ICNIRP is liable, not the guidance nor its issuer.**

"The technical nuances of this specific 5G application warrant a significantly more rigorous level of scrutiny than a standard telecoms filing. Given the legal and health implications identified, I urge the Council to dedicate the necessary resources to a comprehensive, independent review of the evidence provided, ensuring all potential risks are fully evaluated before a decision is reached."

### **Appendix: List of Excluded Medical Devices and Metallic Implants**

#### **1. Active Implantable Medical Devices (AIMD):**

Cardiac Pacemakers and Implantable Cardioverter Defibrillators (ICDs).

Implanted Neurostimulators (e.g., for pain management or Parkinson's).

Cochlear Implants and middle ear implants.

Infusion Pumps (e.g., insulin or baclofen pumps).

Programmable Hydrocephalus Shunts.

#### **2. Passive Metallic Implants:**

Orthopaedic Implants: Metal pins, plates, rods, screws, and total joint replacements (hips, knees, shoulders).

Cardiovascular Implants: Stents (cardiac, urinary, gynaecological), heart valves, and annuloplasty rings.

Contraceptive Devices: Copper IUDs (coils). Filschle clips.

Surgical Mesh: Metallic or metal-containing mesh used in hernia or pelvic organ prolapse repairs.

#### **3. Dental and Other Implants:**

Dental Hardware: Braces, dental implants, metal crowns, pins, and bridges.

Body Piercings: Any permanent or semi-permanent metallic jewellery.

The Council should not rely on a summary assertion that 'there is no evidence of harm,' as such a statement is contradicted by the extensive documentation and empirical data already submitted to this file. Proceeding on the basis of incomplete or inaccurate advice would undermine the **integrity of the planning process** and fail to address the **material health concerns** raised by the community. It is essential that the Council's decision is based on a rigorous evaluation of the specific evidence provided, rather than a generalized dismissal of risk.

The proposed site is inappropriately located due to its extreme proximity to residential properties and two local schools. I urge the Council to give full material weight to the substantial, evidence based objections already submitted. These well researched filings provide specific, empirical evidence regarding the health risks associated with 5G that move beyond the generalised assurances of the industry. The Council has a profound duty of care to its residents, therefore, this decision must be made on a rigorous, independent assessment of the provided data rather than a reliance on standardised, non-independent industry claims.

