The WHO International EMF Project

IRELAND
Report of National EMF Activities in 2023-2024
May 2024

Policy and Legislation

The Department of the Environment, Climate and Communications (DECC) is responsible for setting policy in this area. The Health and Safety Authority (HSA) has responsibility for occupational EMF exposure, while the Health Service Executive (HSE) has responsibility for public health including health advice on exposure to optical radiation, including UV.

The Radiological Protection Act 1991 (Non-Ionising Radiation) Order 2019 (S.I. 190 of 2019) extends the functions of the Environmental Protection Agency (EPA) to include responsibilities related to public exposure to non-ionising radiation in the frequency range 0 Hz to 300 GHz, commonly known as electromagnetic fields (EMF). The functions assigned to the EPA include providing advice to the public and the Government on public exposure to electromagnetic fields (including on relevant standards for public protection), monitoring scientific/technological developments likely to impact on public exposure to EMF, and carrying out independent monitoring of public exposure to EMF to support our advisory role.

Research

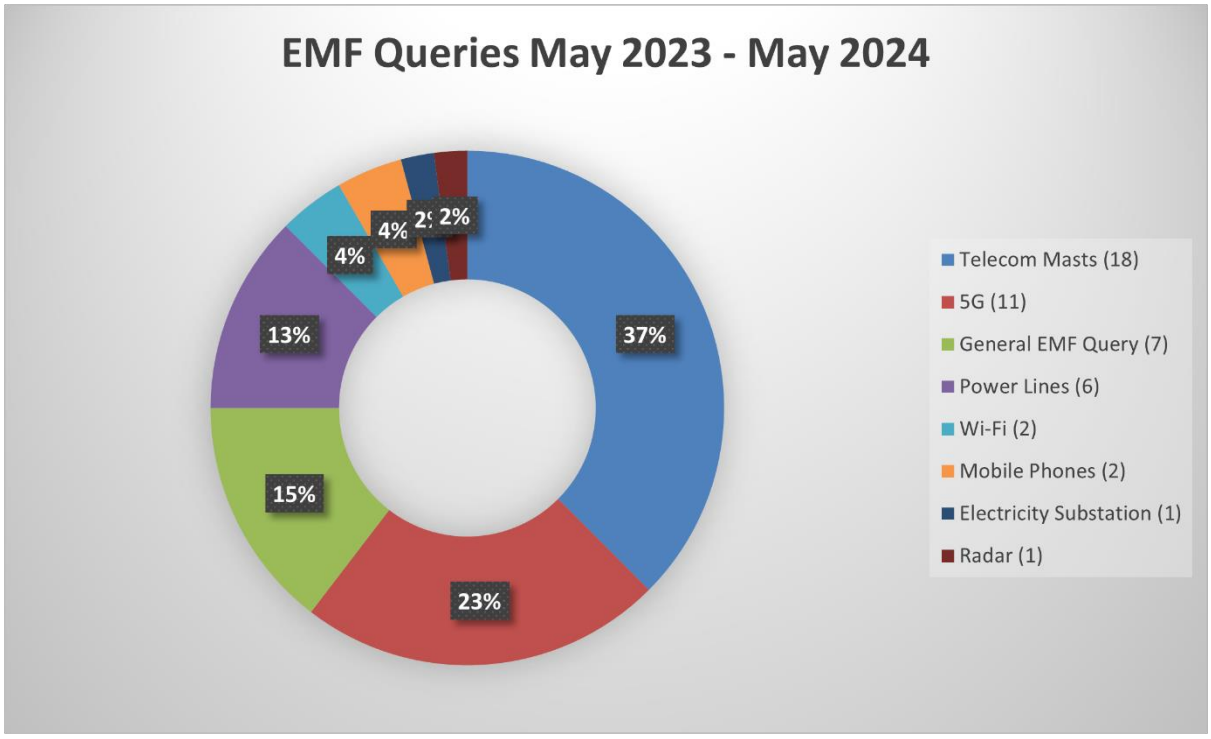
- In March 2024, the final report of an EPA-funded Research Project on public exposure to Extremely Low Frequency (ELF) EMF from major electricity infrastructure in Ireland was published and can be consulted on this link. The project started in April 2022 and the Steering Committee members included two EPA staff members and two international EMF experts from the Netherlands and France, respectively. The project involved reviews of the most updated available scientific literature on the following topics:
    1) ELF EMF exposure of the population from major electricity infrastructure,
    2) Epidemiological studies on health risks associated with exposure to ELF EMF from major electricity infrastructure,
    3) Current EU policies and best practices to control public exposure to ELF EMF,
    4) Science communication & public engagement strategies for ELF EMF exposure risks.
- In February 2024, the EPA hired an intern to carry out a research project on modelling power-frequency magnetic fields from high-voltage overhead power lines in Ireland using available modelling tools and comparing outputs from the modelling to measured results. Technical support on the use of existing modelling tools was obtained from staff from a UK consulting company, EMF Scientific Ltd. An abstract summarizing this work was submitted to the Joint UK & Ireland Occupational and Environmental Epidemiology and Exposure Science annual meeting in London 2024.

- In August 2023, the EPA Board approved to extend its EMF monitoring programme to include measurements of Static and Extremely Low Frequency (ELF) EMF such as those emitted by major electricity infrastructure. New measurement equipment was purchased, and staff were trained in the use of this equipment. In addition, EPA engaged with relevant stakeholders within Ireland to give an overview of the planned monitoring programme and seek feedback on the programme. The programme aims to obtain around 50 measurements in locations with a high density of dwellings, workplaces, and other public facilities within 50 meters of major electricity infrastructure, including AC overhead lines, AC and DC underground cables, and substations. The measurement data collected will be used to support the EPA's advisory role and will be made publicly available on the EPA's website.

- In 2023, the EPA contributed to the WHO EMF Project research efforts with €15,000, which adds to four previous grants (2019, 2020, 2021, 2022). Additionally, EPA staff collaborated as members of the WHO International Advisory Committee, by participating and contributing to WHO meetings in 2023.

Public Concern

During May 2023 – May 2024, the EPA responded to 48 EMF queries from members of the public. Similar to previous years, the majority of queries were about telecommunication towers and base stations ("masts") (37%), followed by 5G (23%), general EMF queries (15%), power lines (13%), Wi-Fi (4%), mobile phones (4%), electricity substations (2%) and radars (2%). Overall, the majority of queries were related to radiofrequency EMF used for telecommunication purposes (69%) while the total number of queries about power-frequency EMF from electricity infrastructure (15%) increased compared to previous years.



Public Information

The EPA's EMF webpages are our primary contact point with the public. These pages are available within the main EPA website and are regularly updated. They cover general and detailed information on EMF exposure, and EMF and health issues. The information EPA provides relies on recommendations of the European Commission, WHO, ICNIRP, IARC as well as public health agencies worldwide.

The EMF webpage on the EPA's EMF monitoring programme was updated to include information on the RF EMF measurement data obtained as part of our EMF monitoring programme carried out between 2022 and 2023. A summary report, a brochure and detailed technical reports describing these data can be consulted here. Social media posts were issued to inform the public and other stakeholders about the availability of this new material.