

The WHO International EMF Project

IRELAND

Report of National EMF Activities in 2024-2025

June 2025

Policy and Legislation

The Department of Climate, Energy and the Environment (DCEE) 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

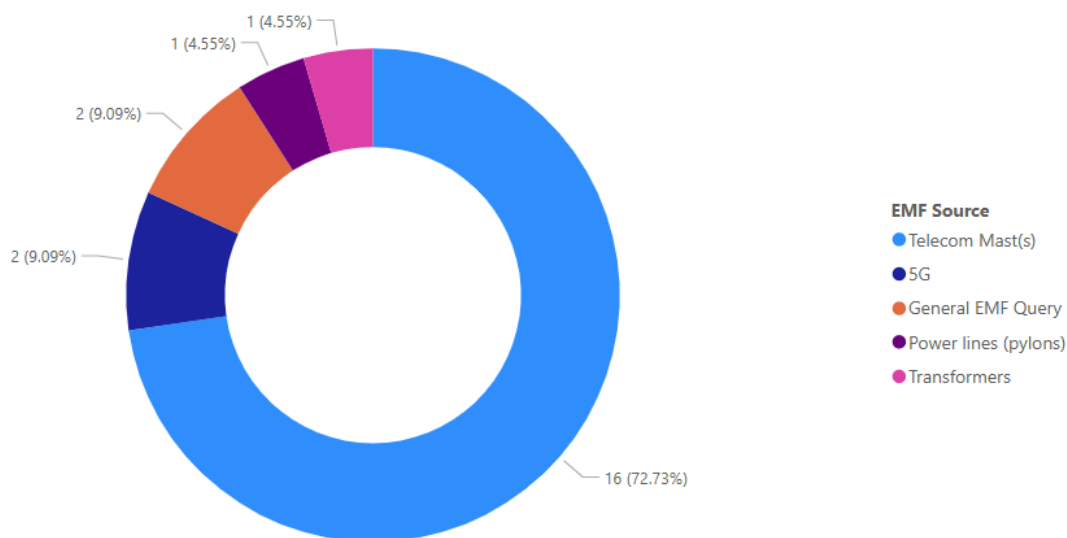
- From February to July 2024, the EPA hired an intern to carry out a research project on modelling power-frequency magnetic fields from high-voltage overhead power lines in Ireland using available modelling tools and comparing outputs from the modelling to measured results. Technical support on the use 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. The intern and a member of EPA staff attended this conference in person and a poster was presented by the intern who also gave a short presentation about it followed by Q&As from other attendants.
- Between May 2023 and November 2024, the EPA carried out measurements of Static and Extremely Low Frequency (ELF) EMF emissions from high-voltage electricity transmission infrastructure in Ireland, including 110kV, 220 kV, 275kV and 400kV overhead powerlines, underground cables and substations. Other information collected included temperature, humidity and the height of the lowest powerline when appropriate. New measurement equipment was purchased, and staff were trained to use this equipment. EPA engaged with relevant stakeholders in Ireland to give an overview of the planned monitoring programme and seek feedback. Measurement locations were selected based on the number of dwellings and other buildings where people live or work and may be exposed to EMF from transmission infrastructure on a regular basis. In total, 80 sets of EMF measurements and ancillary information were obtained at 52 locations within 50m of transmission infrastructure. 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 2024, the EPA contributed to the WHO EMF Project research efforts with €20,000, which adds to five previous grants (2019, 2020, 2021, 2022, 2023). Additionally, EPA staff collaborated as members of the WHO International Advisory Committee, by participating and contributing to WHO meetings in 2024.
- In Q1 2025, the EPA hired an external consultant to carry out a review of policies in Europe to manage EMF from electricity infrastructure. EPA staff also engaged with public representatives with responsibilities for EMF in the UK, Germany, France and the Netherlands to discuss EMF policies in place in their corresponding countries. The information collected will inform future EPA advice to the Irish government.

Public Concern

During May 2024 – May 2025, the EPA responded to 26 EMF queries from members of the public. Most queries were on telecommunication towers and base stations (“masts”) (~73%), followed by 5G (~9%), general EMF queries (~9%), power lines (~5%) and electricity transformers (~5%). Overall, most queries (~96%) were related to EMF associated with telecommunications while there were only two queries (~8%) about EMF in relation to electricity infrastructure during this period.

EMF Queries May 2024 - May 2025



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](#) will be updated in Q3-Q4 2025 to include information about our new EMF monitoring programme in relation to electricity transmission infrastructure in Ireland.