

The WHO International EMF Project

IRELAND

Report of National EMF Activities in 2022-2023

May 2023

Policy and Legislative

The Department of Communications, Climate Action and Environment¹ is responsible for setting policy in this area and is also responsible for national policy on mobile connectivity. 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 main functions assigned to the EPA include providing advice to the Department of Communications, Climate Action and Environment and information to the public, stakeholders and the Government on public exposure to EMF, as well as monitoring public exposure to EMF to inform our advisory role to the Minister.

Research

During 2022 and 2023, EPA funded a Research Project on extremely low frequency (ELF) EMF. This project aims to assess issues related emissions from major electricity infrastructure in Ireland, such as the Celtic Interconnector between Ireland and France. The project started in April 2022 and the Steering Committee members include two EPA staff members and two international EMF experts from the Netherland and France. The project research team carried out systematic, umbrella and/or state-of-the-art reviews of the most updated available literature on the following topics:

- 1) ELF EMF exposure of the population from major electricity infrastructures;
- 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 and public engagement strategies for ELF EMF exposure risks.

Project deliverables include several technical and summary reports, public communications, and, if so agreed with the Research team, one or more peer-reviewed publications. Four internal technical reports have been submitted by the research team and a public Research report is expected to be submitted in May 2023.

¹ As of 22nd September 2020, the Department of Communications, Climate Action and Environment became the Department of Environment, Climate and Communications.

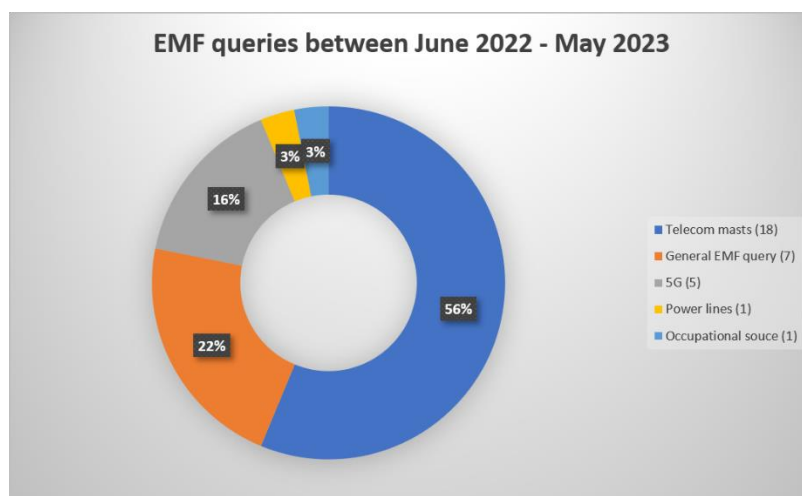
During 2022-2023, EPA staff, with the assistance of a statistician from University College Dublin (UCD), analysed RF EMF measurement data collected by EPA at 57 locations throughout Ireland. 55 of these measurements were carried out at street level in urban locations. Two extra locations were measured as a reference to assess the potential RF-EMF levels in a remote low exposure environment and close to a higher exposure location. In addition, the most recent results of RF EMF measurements carried out by the Commission for Communication Regulation (ComReg) near telecommunication sites were obtained from their website and analysed. The results of these analyses are being used to support our statutory advice function. A summary report and a short explanatory brochure summarising the RF EMF measurement data will be published on the [EPA's website](#) in mid-2023.

In Q4 2022, EPA commenced planning to widen its EMF monitoring programme to include measurements of static and extremely-low frequency (ELF) EMF such as those emitted by electricity infrastructure (e.g. underground DC cables, overhead AC powerlines, substations and converter stations). New equipment was purchased, and staff training is expected to be completed by June 2023. Measurements of static magnetic fields and ELF EMF from the most relevant sources in Ireland are expected to commence by Q4 2023. This measurement data will be used to support our advisory role and will be made publicly available on the EPA's website.

In 2022, the EPA contributed to the WHO EMF Project research efforts with €20,000, which adds to three previous grants (2019, 2020, 2021) of the same amount previously allocated for this purpose. Additionally, EPA staff collaborated as members of the WHO International Advisory Committee, by participating and contributing to WHO meetings in 2021 and 2022.

Public Concern

Similar to previous years, the number of queries on 5G fell during the 2022-2023 period. During the last year (June 2022 – May 2023), most queries were on EMF from telecommunication towers and base stations (“masts”) (56%), followed by general queries on EMF (22%) and queries on 5G (16%). However, queries on 5G and telecommunication masts taken together comprised 72% of all queries received during this period, while the number of queries on power lines fell to just 3%.



Public Information

The [EPA's EMF website is our primary contact point with the public. These pages](#) are available and regularly updated within the main EPA website. They cover general and detailed information on EMF exposure, and EMF and health issues. The information EPA provides relies on includes: recommendations of 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 to include information on the RF EMF measurement data. The new content will include graphs and maps as well as links to all 57 technical reports, a summary technical report and the brochure. Social media will be used to increase the visibility of this new material by the public and other stakeholders.