The WHO International EMF Project

IRELAND Report of National EMF Activities in 2019-20 July 2020

Policy and Legislative

In May 2019, Radiological Protection Act 1991 (Non-Ionising Radiation) Order 2019 (S.I. 190 of 2019) extended 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. This frequency range is commonly known as electromagnetic fields (EMF). Specifically, the functions assigned to the EPA include to:

- provide advice and information to Government and the public on public exposure to EMF;
- monitor scientific, technological or other developments on EMF and to update the Minister;
- co-operate with relevant authorities in other States and to represent the State at an international level; and
- carry out independent monitoring of public exposure to EMF to inform our advice function.

Within the EPA, a technical team with expertise in EMF issues such as exposure assessment, and risk assessment and communication were established. This has been achieved through recruitment of an expert in EMF and training of existing radiological protection staff. One of the key priorities for 2019/2020 has been liaison with other stakeholders in Ireland with responsibilities in EMF issues, including:

- Department of Communications, Climate Action and Environment who are responsible
 for national policy on electrical and mobile connectivity in Ireland. This Department is
 also responsible for policy relating to the public exposure to non-ionising radiation,
 including EMF.
- Commission for Communications Regulation (ComReg), responsible for allocating and licensing the use of the radiofrequency spectrum for telecommunication purposes, as well as monitoring EMF emissions from licensed transmitters;
- Department of Rural and Community Development (DRCD), which facilitates the work
 of local authorities and broadband Officers to address connectivity deficits, especially
 in rural areas;
- National Standards Association of Ireland (NSAI), responsible for the development and application of Irish Standards including those related to human exposure to EMF and electromagnetic compatibility (EMC) of devices;
- EirGrid and ESB Networks, responsible for ensuring that public exposure to EMF from electricity installations (e.g. power lines, substations) and other infrastructure (e.g. smart meters) is below international guidelines;

- Commission for Regulation of Utilities (CRU), which has a range of economic, customer protection and safety responsibilities in energy and water;
- The Health and Safety Authority who regulate occupational exposure to EMF under the Safety, Health and Welfare at Work (Electromagnetic Fields) Regulations 2016 (SI No 337 of 2016).
- The Health Service Executive who have responsibilities for Public Health in Ireland and implementing the National Cancer Programme which include the national Skin Cancer Prevention Plan.

Research

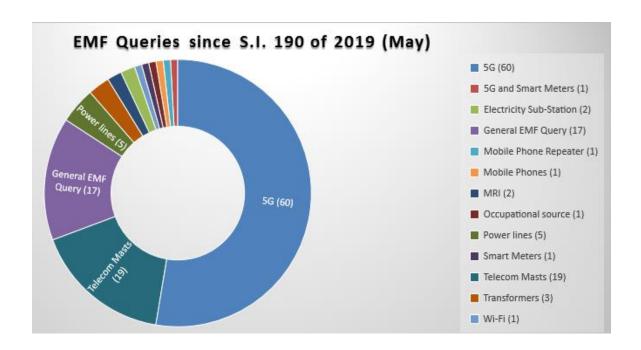
In 2015, the Irish Government commissioned the National Institute for Public Health and the Environment of the Netherlands (RIVM) to review the state of the evidence on EMF and health, with a focus on the situation in Ireland. This review gave rise to the report "<u>Electromagnetic</u> Fields in the Irish Context".

The EPA has contributed to the WHO EMF Project research efforts financially and by making staff available. EPA staff collaborate as members of the WHO International Advisory Committee, and by participating and contributing to WHO meetings. This helps maintain staff expertise in EMF and enables the EPA to monitor the available scientific evidence in implementing its statutory functions but also to ensure its advice remains current

Public Concern

In previous years, EMF emissions from power lines and other electricity installations (e.g. transformers, substations) and their potential effects on human health led to public concern in some areas due to the ongoing expansion of the high-voltage transmission network. Concerns and arguments against the expansion plan were presented to planning authorities by local communities, including EMF potential health effects and other issues.

Recently, however, most queries have been due to concerns associated with telecommunication masts, and 5G in particular. Thus, out of the over a hundred queries EPA has received since May 2019, over 50% were about the safety of 5G, 17% were about telecommunication sites or masts in general, 15% were about general EMF issues, while only around 9% were on power lines, transformers and substations. The rest involved queries on other EMF sources (e.g. Wi-Fi, mobile phones, smart meters, occupational sources).



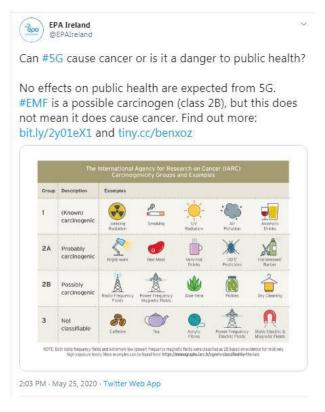
In relation to concerns about 5G and EMF in general, it is particularly relevant the importance that social media has played in contributing to public misinformation. Concerns raised by some groups and individuals have led to a number of local authorities approving motions to oppose the roll-out of 5G in their region. In addition, there has been one reported case of arson to a telecommunication mast in one county. These actions have not changed national policy on the deployment of 5G in Ireland. However, concern remains among Government Departments and State agencies as well as among mobile operators about how these actions may affect the planned 5G deployment in the future.

Since May 2019, the EPA have received several queries from people who unfortunately report debilitating symptoms, medical in nature that they attribute to exposure to EMF from either telecommunication equipment and/or electricity installations. The EPA is unable to give medical advice so would advise these people to visit their Doctor to seek possible treatments to these symptoms.

Public Information

Responses to queries from the public, stakeholders and the Government have been developed based on the findings of the RIVM review as well as on the official positions of the WHO, ICNIRP, The European Commission, IARC and other public health agencies worldwide (e.g. PHE, ARPANSA).

As part of the EPA's role of providing information to the public, <u>new EMF webpages</u> have been developed on the EPA's website. These cover general and detailed information about EMF exposure, and EMF and health issues. <u>Content on 5G</u> was recently added to our website including an information brochure published on <u>5G and Health</u>. The <u>@EPAIreland</u> social media platforms (<u>Twitter</u> and <u>Instagram</u>) have also been used to increase the public's knowledge of key topics, such as 5G and where they can get further information. (See example below).



This tweet on 5G and Health was the top EPA tweet for June 2020 with over 13,000 impressions

To date, social media messages have focussed on the topics of most public interest, such as 5G and mobile phones and health. This has resulted in a noticeable increase in traffic to the EPA's 5G website where 5G appeared in the top search queries to the EPA's EMF website. This points to a growing association of the EPA's website with information on EMF.

Several other Irish governmental and public-private agencies also provide information on public exposure to EMF:

- The Department of Communications Climate Action and Environment <u>FAQs.</u>
- The Commission for Communications Regulation (ComReg) provides information for the public on the location of telecommunication sites (https://siteviewer.comreg.ie/) as well as reports of the measurements carried out as part of their role in monitoring EMF emission levels nearby these sites (https://www.comreg.ie/nir-reports/).
- The main electricity companies, ESB & EirGrid, provide detailed information on this subject on their websites.

The EPA is developing a monitoring programme to assess population-based exposure to EMF. This programme aims to complement the monitoring carried out by ComReg nearby telecommunication sites, assessing exposure of the public to all EMF sources. The programme will be published for public consultation in autumn 2020. Results from this work will be made available to the public on the EPA website.

Environmental Protection Agency

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