Electromagnetic Field Policy

1. Scope

1.1. It is the policy of University of Greenwich, so far as is reasonably practicable, but in accordance with the relevant statutory requirements and good practice, to ensure the health and safety of all university employees, students, contractors, and visitors who operate or are exposed to equipment that produces electromagnetic fields (EMF). The purpose of this policy is to establish guidelines for the safe use and management of equipment and activities that generate high levels of EMF to protect the health of those at particular risk within the University, in compliance with the Control of Electromagnetic Fields at Work 2016 Regulations.

1.2. The Policy applies to:

- **Frequency Range:** Electromagnetic fields in the frequency range of 0 to 300 Gigahertz (GHz). This covers a broad spectrum of electromagnetic frequencies, including both lower frequencies (power frequencies) and higher frequencies (microwaves).
- **University and Professional Services:** The regulations cover various aspects of the institution, not limited to academic activities but also including administrative and support services.
- **Equipment:** All equipment that produces applicable levels of EMF, specifically mentioning power frequencies and microwaves. This includes any machinery or devices used by, at, or for the university that generate electromagnetic fields falling within the specified frequency range.
- **Individuals:** The policy extends its coverage to all individuals associated with the university, including staff, students, contractors, and visitors who could potentially be adversely affected by EMF or are considered "Persons at Particular Risk." This broad category includes anyone who may come into contact with equipment producing electromagnetic fields.
- **High EMF Equipment:** This explicitly includes individuals directly involved in operating or handling equipment that generates elevated electromagnetic fields.

1.3. This Policy **does not** consider**:**

- **Natural and Atmosphere EMF:** These fields are typically at lower frequencies and are not under the control of human activities. As such, the policy focuses on human-generated electromagnetic fields within a certain frequency range.
- **EMF from Electrical Grid and External Infrastructure:** Electromagnetic fields originating from the electrical grid and related infrastructure that is outside the control of the University. This policy recognizes that there are external sources of electromagnetic fields, such as power lines and substations, which may have regulatory oversight from other entities or government agencies.

2. Definitions

- **Action Levels (ALs):** defined quantities to help ensure that occupational exposures to electric or magnified fields are maintained below ELVs. The ALs can be found in Part 3 and Part 4 of Schedule 1 in CEMFAW16 regulations.

- **Electromagnetic Field (EMF):** encompasses static electric fields, static magnetic fields, and time-varying electric and magnetic fields (radio wave fields) with frequencies up to 300 GHz. The generation of electromagnetic fields occurs in various scenarios, such as when a piece of electrical equipment is plugged in and operational. This aligns with the understanding that any device or equipment that uses or generates electrical power can produce associated electromagnetic fields.

- **Persons at Particular Risk:** individuals who, due to specific medical conditions or the use of certain medical devices, may be more susceptible to the direct biophysical effects of exposure to EMF. Persons with active or passive implanted medical devices are at particular risk. This encompasses a range of devices such as cardiac devices, stents, heart valve prostheses, brainstem implants, cochlea implants, orthopaedic implants, pins, plates, screws, insulin or hormone pumps, hearing aids, metalized drug-delivery patches, glucose monitoring devices, and drug infusions. Pregnant women are also included in this category. The developing foetus may be more susceptible to the effects of EMF exposure, and precautions should be taken to minimize potential risks.

- **Gigahertz (GHz):** is a unit of measurement used to quantify the frequency of electromagnetic waves. One gigahertz is equivalent to one billion hertz, where a hertz represents one cycle per second.

- **Exposure Limit Values (ELVs):** are indeed legal limitations set to regulate and limit the exposure of employees to Electromagnetic Fields (EMFs). These values define the maximum levels of electromagnetic field exposure that individuals in the workplace are allowed to experience without risking adverse health effects.

3. Roles and Responsibilities

3.1. In accordance with the University's Health and Safety Policy, day to day operational responsibility for health and safety has been delegated to each Faculty and Professional service. Also, in accordance with the policy all staff and students are required to comply with the EMF standard.

3.2. Faculty / Professional Service Responsibilities:

3.2.1. Equipment Oversight:

- Responsible persons are accountable for ensuring that all electrical and electronic equipment under their purview complies with EMF safety standards.
- Regularly inspect and monitor equipment to identify any deviations from safety standards.

3.2.2. Risk Assessment:

- Conduct suitable and sufficient risk assessment for equipment and activities within their control that involve electromagnetic fields.
- Implement measures to mitigate identified risks and regularly review risk assessments to ensure continued safety.

3.2.3. Training and Education:

- Facilitate and ensure that all staff and students under their supervision receive proper training on EMF safety protocols.
- Provide ongoing education and awareness programs to keep personnel informed about the potential risks and safety measures related to EMF.

3.2.4. Implementation of Control Measures:

- Take proactive steps to implement control measures that minimize exposure to electromagnetic fields.
- Ensure that engineering controls and administrative measures are in place to safeguard the health and safety of individuals.

3.2.5. Communication and Signage:

- Clearly communicate EMF safety guidelines and procedures to all personnel within their departments or research groups.
- Ensure that appropriate signage is displayed in areas where significant EMF exposure is possible.

3.2.6. Documentation:

- Maintain accurate records of equipment, risk assessments, and training programs related to EMF safety.
- Make documentation available for internal audits and external inspections as required.

3.2.7. Review and Continuous Improvement:

- Periodically review and assess the effectiveness of EMF control measures within their areas of responsibility.

3.2.8. Compliance:

- Assess or calculate the level of exposure created by the 'EMF Sources' to ensure levels are below the ALs and the ELVs stipulated within the CEMFAW Regulations.
- Compliance with this policy will be regularly monitored and enforced.
- The policy will be reviewed periodically to ensure its effectiveness and relevance.

3.3. Staff, Students, Contractors, and Visitor Responsibilities

As with those duties placed upon the University and its Academic/Professional Services staff, students, visitors and contractors also have responsibilities in law. With regards to this Policy, they must:

3.3.1. Staff and Students:

- Advice Faculty or Professional Services when they have a medical implant or medical device which may be impacted by high levels of EMF or are expecting a child and may access areas or use equipment generating levels of EMF.

3.3.2. For Visitors who are at Particular Risk:

- Be aware of EMF signage and seek advice of local staff if accessing any areas of EMF which may impact devices or implants, or unborn child.

3.3.3. For Contractors:

- Advise the employing Faculty/Professional Service of any staff member who may be susceptible to EMF and work with the University to Safeguard their well-being.

3.3.4. For All:

- Follow all management controls implemented by the Faculty/Professional Service.
- Immediately inform an appropriate person if they believe their work could create high EMF.
- Only use systems they have been instructed and/ or trained and authorised to operate.
- DO NOT interfere with or mis-use systems put in place to protect against EMFs.
- Immediately report concerns or defects with any equipment/ controls to an appropriate person.

4. Equality Impact Assessment

4.1. The goal of an Equality Impact Assessment (EIA) is to embed equality considerations into decision-making process', promote fairness, and create policies that are inclusive and respectful of diversity.

4.2. The University therefore acknowledges that individuals identified as "Persons at Particular Risk" may require special consideration and treatment. This recognition is essential for ensuring that potential vulnerabilities or sensitivities to high levels of EMF are addressed appropriately.

4.3. Those affected will be consulted during the assessment process, as their input can provide valuable insights into their specific circumstances and needs. In situations where necessary, the advice of specialist medical practitioners or medical device manufacturers will be sought.

5. Review and Audit Procedures

5.1. The Health and Safety Services Team may undertake periodic audits/inspections to assess the effectiveness of and compliance with, this Policy.

5.2. Faculties / Professional Services must periodically review their own procedures to ensure the requirements of this Policy are implemented, suitable and effective.