

The Gigabit Infrastructure Act (GIA) for deployment of 5G millimeter wave technology must be postponed

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The EU Commission has proposed a regulation called the Gigabit Infrastructure Act (GIA) for deployment of 5G millimeter technology. The proposal unilaterally favors telecom industry. It would pave the way for much denser 5G infrastructure technology, mainly millimeter wave technology (26 GHz and above).

The GIA proposal lacks health and environmental impact assessments on (a) the cumulative radiofrequency (RF) radiation exposure from the 5G until now and (b) the total radiation after planned deployment of new millimeter wave technology. No studies prove that humans, especially children, flora and fauna can tolerate the total radiation exposure that will be the consequence.

The GIA is contrary to the consolidated version of the Treaty on the Functioning of the European Union (TFEU) Article 3 stating that the objectives of the EU include *'a contribution to a high level of health protection'* and Article 168 that *a high level of human health protection shall be ensured in the definition and implementation of all Union policies.*

The 433 scientists and physicians who have endorsed the 5G Appeal (www.5gappeal.eu), ask for a moratorium on the 5G roll-out until the health risks have been fully investigated by scientists with no conflicts of interest and truly independent from the industry that benefits from 5G.

The majority of scientists in this field agree in the EMF Scientists Appeal (www.emfscientist.org) that research on health effects from previous generations of wireless technologies show increasing evidence of harmful effects such as DNA damage, oxidative stress, on reproduction and well-being, and increased cancer risks

A democratic society like EU must ensure that the environment and humans, especially children, will not be exposed to new forms of radiation never experienced in history. The burden of proof to demonstrate absence of serious environmental and health impacts must be placed on those industries responsible for the exposure, on the EU and health agencies before supporting 5G expansion.

Several expert groups, e.g. ICBE-EMF¹, Health Council of the Netherlands² and EU Parliament's STOA³, have concluded there is insufficient or no studies on health impacts from 5G millimeter waves.

To date, only four case studies have examined the health impact of real life exposure to radiation from 5G antennas deployed to date at frequencies around 3.5 GHz. All show rapidly developing adverse health impacts. GIA additions will increase the risks.

We therefore ask for the GIA to be postponed until truly independent research has shown that this technology is safe for humans and all biological life. To deploy this technology without safety testing would force all European people to be "guinea pigs" in a massive health experiment which infringes several EU laws and the treaty, see Annex.

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¹ https://icbe-emf.org/wp-content/uploads/2022/10/ICBE-EMF-paper-12940_2022_900_OnlinePDF_Patched-1.pdf

² <https://www.healthcouncil.nl/documents/advisory-reports/2020/09/02/5g-and-health>

³ [https://www.europarl.europa.eu/stoa/en/document/EPRS_STU\(2021\)690012](https://www.europarl.europa.eu/stoa/en/document/EPRS_STU(2021)690012)

Annex. EU Rights, principles and statements violated in the rollout of 5G communications technology. See Nyberg R, McCredde J, Hardell L. The European Union assessments of radiofrequency radiation health risks – another hard nut to crack (Review). Rev Env Health, 2023 <https://doi.org/10.1515/reveh-2023-0046>

Law/Charter/ Principle	Rights /Principles / Statements	Violations
The consolidated version of the Treaty on the Functioning of the European Union (TFEU) 6,64	<p>Article 3(o) The objectives of the Community include '<i>a contribution to a high level of health protection</i>'.</p> <p>Article 168 (Public Health) <i>A high level of human health protection shall be ensured in the definition and implementation of all Union policies and activities</i></p>	<p>The EU is ignoring the repeated advice of independent scientists and instead, adhering to the advice of industry linked scientists in ICNIRP and SCHEER.</p> <p>The EU Declaration on digital rights and principles. 2022</p> <ul style="list-style-type: none"> • does not mention human health or protection • defines human rights as <i>data protection rules and equal treatment</i> <p>Emphasis is not on people’s health, but on people’s rights regarding access to <i>artificial intelligence, data analytics</i>..</p>
TFEU	<p>Article 168 (Public Health) <i>A high level of human health protection shall be ensured in the definition and implementation of all Union policies and activities.</i></p> <p>- <i>The Parliament and the Council... may also adopt incentive measures designed to protect and improve human health.</i></p>	<p>The GIA proposal supports economic savings for telecom but health protection is not considered, which violates <i>EU law and the EU principle that protection of health must have precedence over economics.</i></p> <p>GIA incentivises economic gain for telecom and 5G which harms instead of <i>protecting and improving human health.</i></p>
TFEU	<p>Art. 191(2) <i>Union policy on the environment ...based on the precautionary principle ... preventive action should be taken, that environmental damage should as a priority be rectified at source.</i></p>	<p>To intensify 5G radiation and neglect precaution violates EU law by causing harm for the environment; pollinating insects, animals, children and foetuses. Prevention is cheaper than repair and saves lives and money in the long run.</p>

Charter of Fundamental Rights of the European Union (2012/C 326/02) ⁵	<p>Article 3 Right to the integrity of the person <i>1. Everyone has the right to respect for his or her physical and mental integrity.</i> <i>2. In the fields of medicine and biology, the following must be respected in particular:</i> <i>(a) the free and informed consent of the person concerned, according to the procedures laid down by law;</i></p>	<p>The physical and mental integrity of each person is being corrupted by electromagnetic pulses from wireless technologies.</p> <p>The NIR technologies have been rolled out before adequate research has been conducted into the biological effects. Consequently, all peoples are part of a global experiment, without their consent, on how these technologies will affect humans in the long run, mentally, emotionally, physically and spiritually.</p>
	<p>Article 8 Protection of personal data <i>1. Everyone has the right to the protection of personal data concerning him or her.</i> <i>2. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law.</i></p>	<p>Smart meter data is not secure and private.</p> <p>The data that is being collected is more than is needed for invoicing. It is being taken for marketing and control purposes, several times a minute, putting human health at risk.</p>
	<p>Article 31 Fair and just working conditions <i>1. Every worker has the right to working conditions which respect his or her health, safety and dignity</i></p>	<p>Technologies in the workplace, such as GPS tracking continuously on in vehicles and tablets is being mandated during working hours.</p>
United Nations General Assembly Convention on the Rights of the Child ⁹⁷	<p>Article 3 <i>1. In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration</i></p>	<p>The health and wellbeing of children is not protected. The new ICNIRP guidelines do not consider babies or children as different from adults, and therefore offer no special precautions to protect them.</p> <p>Testing of phones uses 6-30 min. heating of liquid in a very large plastic phantom head⁵². Testing does not include long-term exposures of heads the size of children.</p>

<p>EU ITRE committee 2019 in-depth analysis, <i>5G Deployment: State of Play in Europe, USA and Asia</i>⁶²</p>	<p><i>Complex beam formed signals have unpredictable propagation patterns that could result in unacceptable levels of human exposure to electromagnetic radiation (p. 6) ... aggregation of different signals, their dynamic nature, and the complex interference effects that may result, especially in dense urban areas (p. 11)</i> <i>.. are yet to be mapped reliably for real situations, outside the laboratory (p. 11).</i></p>	<p>Complex pulsed, modulated, and beam-formed RFR signals are being used in 5G. These more bio-active than simple continuous waves of the same intensity and exposure duration and are added to all earlier sources of non ionising radiation. Only mean values from single sources are evaluated for compliance, never aggregations or long-term exposures. There has been inadequate research into how these will affect humans, with early research showing harm (see article), yet they are being rolled out with the support of the EU.</p>
<p>2021 EPRS/STOA <i>Health impact of 5G report</i>⁶³</p>	<p>Sufficient evidence for cancer from RFR in animals, sufficient evidence for adverse effects from RFR on the fertility of men, male rats and mice, and that RFR is probably carcinogenic to humans Thus EU must <i>incentivise the reduction of RF-EMF exposures, e.g., minimise exposure, wherever connections are needed at fixed sites. For example, we could use optic fibre cables to connect schools, libraries... (p. 153).</i></p>	<p>Connecting Europe Facility (CEF Digital) proposal¹⁰⁷ recommends <i>5G/6G expansion</i> in opposition to the EPRS/STOA recommendations.</p>
<p>EU Energy Efficiency Action Plan⁹⁴</p>	<p><i>...the 2020 20 % energy efficiency target as agreed by the June 2010 European Council, which is presently not on track, must be delivered</i></p>	<p>Significant additions to infrastructure and delivery of 5G and installation and constant reading of smart meters is increasing the existing energy burden 10-fold or more.¹⁰⁸</p>
<p>European Green Deal⁹⁵</p>	<p><i>...protect the health and well-being of citizens from environment-related risks and impacts. .. must be just and inclusive. .. must put people first...</i></p>	<p>NIR signals pulsing 24/7, covering the globe will jeopardize human planetary health.</p>
<p>European Convention on Human Rights⁴</p>	<p>Article 1 <i>Obligation to respect Human Rights</i></p>	<p>Informed consent has not been given. The public is unaware of the harm that wireless technologies are doing because this information is being covered up by the regulators and industry. Those who are aware have no choice but to be exposed against their wishes, due to the ubiquitous nature of this technology in the workplace, in all cities and towns, national parks and remote</p>

		environments.
Application of The EU Treaty into EU Case law	<p>Mad Cow Disease Case 157/96, <i>National Farmers Union</i>¹⁰⁵ (paragraph 22) <i>public health requirements are indivisible and universal</i> Case 183/95 <i>Affish</i>¹⁰⁴ (paragraph 43) and Case 136/95 <i>Industria del Frio Auxiliar Conservera</i>¹⁰⁶ (paragraph 58) <i>the protection of public health which the contested decision is intended to guarantee must take precedence over economic considerations</i></p>	