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DIRECTORATE-GENERAL HEALTH AND FOOD SAFETY

Public health, country knowledge, crisis management
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By electronic mail

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Dear Professor Nyberg,
Dear Professor Hardell,

Subject: 5G Appeal - Scientists and doctors warn of potential serious health effects of 5G

Thank you for your e-mail of 13 September 2017 addressed to Commissioner Andriukaitis and for drawing his attention to your concerns about the potential serious health effects of 5G technology. The Commissioner has asked me to reply on his behalf.

It is worth underlining that for the Commission health protection is always taken into account in all of its proposals. There is consistent evidence presented by national and international bodies (International Commission on Non Ionising Radiation Protection - ICNIRP, Scientific Committee on Emerging and Newly Identified Health Risks - SCENIHR) that exposure to electromagnetic fields does not represent a health risk, if it remains below the limits set by Council Recommendation 1999/519/EC¹.

The legal framework established under the Radio Equipment Directive² provides for the safety of radio devices placed on the EU market. In addition to the national enforcement of the EU law, the Commission encourages research into effects of exposure to Electromagnetic fields and periodically requests an independent update of the scientific evidence available. The Scientific Committee on Emerging and Newly Identified Health Risks, which is independent of the Commission, has a standing mandate to provide this update.

¹ https://ec.europa.eu/health/sites/health/files/electromagnetic_fields/docs/emf_rec519_en.pdf

² Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC.

It has already produced five opinions. The last opinion³ was adopted in January 2015 on "Potential health effects of exposure to electromagnetic fields". These scientific opinions have not provided any scientific justification for revising the exposure limits (basic restrictions and reference levels) under Council Recommendation 1999/519/EC.

The strict and safe exposure limits for electromagnetic fields recommended at EU level apply for all frequency bands currently envisaged for 5G.

The Commission agrees that there is need for constant update of scientific knowledge, which must also be taken into account in the development of the 5G technology. Such knowledge will contribute to the aim of balancing exposure of the general public to EMF with benefits brought by 5G (including eHealth) to the quality of life.

Digital technologies and mobile communication technologies, including high speed internet, will be the backbone of Europe's future economy, allowing all citizens to be connected. At the same time, all citizens deserve appropriate protection against electromagnetic fields from all types of sources including from wireless devices. The Commission has therefore been following this issue closely so as to stick to the appropriate protection levels defined by world experts. The number of sources as such does not determine the electromagnetic fields exposure at a given location. Most 5G networks are expected to use smaller cells than previous generations with lower electromagnetic fields exposure levels. This is confirmed by the experience so far gained. The introduction of 3G and 4G has not increased exposure from environmental fields and this has been published also in peer-reviewed journals. In particular, the introduction of 3G has lowered exposure of mobile phone users for calls, compared to 2G.

EU regulation is to ensure consistency and predictability throughout the Union regarding the way the use of radio spectrum is authorised in protecting public health against harmful electromagnetic fields (0 Hz- 300 GHz), having particular regard to the precautionary approach taken in Council Recommendation No 1999/519/EC.

Furthermore, the proposal for a European Code for Electronic Communications⁴, which will pave the way for 5G mobile communications, and which is currently debated in Council and Parliament, sets as a principle for spectrum management to be applied by Member States the need for consistency and predictability throughout the Union regarding the way the use of radio spectrum is authorised in protecting public health against harmful electromagnetic fields. The existing framework also allows Member States to restrict the use of types of technologies where necessary to protect public health against electromagnetic fields taking utmost account of the Council Recommendation 1999/519/EC.

Related to the issue of the alleged conflicts of interests, the Commission is not aware of any conflicts of interests of members of international bodies such as ICNIRP or the members of SCENIHR. Please be informed that the Ombudsman conclusion in case 208/2015/PD⁵ concerning conflicts of interests in a Commission expert group on electromagnetic fields is that there was no maladministration by the European Commission.

³ https://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_041.pdf

⁴ <https://ec.europa.eu/digital-single-market/en/news/proposed-directive-establishing-european-electronic-communications-code>

⁵ <https://www.ombudsman.europa.eu/en/cases/decision.faces/en/78175/html.bookmark>

Please be assured that the Commission will pursue scrutiny of the independent scientific evidence available to ensure the highest health protection of our citizens.

Yours sincerely,

John F. Ryan
Director