



September 15, 2017

TO: Innovation, Science and Economic Development Canada
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RE: **Canada Gazette, Part I, June, 2017, "Consultation on Releasing Millimetre Wave Spectrum to Support 5G", notice reference number (SLPB- 001-17).**

SUBJECT:

This submission requests that a moratorium be placed on the licensing and deployment of 5G bandwidths and associated infrastructure until safe places are provided for persons made ill by acute and/or chronic exposure to radiofrequency electromagnetic fields (RF-EMF).

Electromagnetic Pollution Illnesses Canada Foundation (EPIC) is a volunteer-based not-for-profit corporation in Canada, funded by donations, established to:

- provide support and services to adults and children affected by electromagnetic pollution;
- provide information to the public about electromagnetic pollution and its impact on health and wellbeing;
- promote the creation of healthy environments.

EPIC is aware thousands of Canadians suffer ill health from exposure to machine-generated RF-EMF (of various, several, or all frequencies). Some of these Canadians have become "refugees" *within Canada*, as they have difficulty locating places to live (and provide themselves with the necessities of life) where RF-EMF is low-density.

The deployment of 5G would add more density and more emissions sources of RF-EMF, undoubtedly increasing the difficulty in maintaining or establishing personal safety for themselves in their communities, as these individuals' tolerance threshold to this physical agent is already threatening their day-to-day survival. This deployment would increase the number of Canadians displaced and side-lined from life, either again or newly as such refugees.

Dr. Beatrice Golomb made a recent submission to the State of California regarding pertinent RF-EMF exposure experiences: <https://drive.google.com/file/d/0B14R6QNkmaXubmZUjWl1aERpX1E/view>

It is my understanding that infrastructure 5G RF-EMF-emitting antennas would be densely installed within each neighbourhood, due to physical limitations inherent to machine-generated millimetre waves.¹

¹ Canadians for Safe Technology: <http://c4st.org/5g/>

RF-EMF exposure concerns related to adverse health effects, and therefore risk to safety, have been researched and publicized by hundreds of scientists worldwide. Here are two examples of their recent outreach requesting urgent intervention by policy- and law-makers charged with protecting all citizens and environments; you will see that experts based in Canada are among them:

Declaration sent to officials of the European Commission demanding a moratorium on 5G proliferation² “Scientists warn of potential serious health effects of 5G”

September 13, 2017

"We the undersigned, more than 180 scientists and doctors from 35 countries, recommend a moratorium on the roll-out of the fifth generation, 5G, for telecommunication until potential hazards for human health and the environment have been fully investigated by scientists independent from industry. 5G will substantially increase exposure to radiofrequency electromagnetic fields (RF-EMF) on top of the 2G, 3G, 4G, Wi-Fi, etc. for telecommunications already in place. RF-EMF has been proven to be harmful for humans and the environment."

Declaration sent to the World Health Organization, the United Nations, and United Nations Member Nations urging standards more protective of human health “International appeal: Scientists call for Protection from Non-ionizing Electromagnetic Field Exposure”

May 11, 2015

Statements are such that current guidelines/standards (e.g., Health Canada's *Safety Code 6*) are inadequate and precautionary and cautionary measures are warranted. This Appeal continues to gather support—currently its signatory count is 232 experts scientists from 41 nations. These scientists have published peer-reviewed papers on the biological or health effects of non-ionizing radiation.

*"These findings justify our appeal to the United Nations (UN) and, all member States in the world, to encourage the World Health Organization (WHO) to exert strong leadership in fostering the development of more protective EMF guidelines, encouraging precautionary measures, and educating the public about health risks, particularly risk to children and fetal development. By not taking action, the WHO is failing to fulfill its role as the preeminent international public health agency."*³

When we search scientific literature (including sources suggested by Health Canada) for studies about specifically millimetre wavelengths, there seems to be a dearth of studies on long-term exposures to healthy animals (including humans), and definitely no studies have been published about those exposures to persons who suffer ill effects related to other RF-EMF wavelengths. The literature examining adverse biological effects of modern everyday levels of machine-generated RF-EMF (at various frequencies and densities) is substantial; it is not feasible to include an enormous list of references in this submission, and we readily can, upon request, direct you to various authorities and compendiums.

For day-to-day survival and the necessities of life, vulnerable individuals, such as Canadians made ill from RF-EMF exposure/injury, need safe places—indoor and outdoor places where anthropogenic EMFs are at levels low enough to at least fulfill their needs and rights for survival, sanctuary of the home, and provision of necessities of life. Provision and availability of such places must be enabled by government

² <https://drive.google.com/file/d/0B14R6QNkmaXuelFrNWRQcThNV0U/view>

³ <https://emfscientist.org/>

intervention, in advance, in perpetuity, by any government that proposes to enable, promote, or support deployment of licenced or unlicenced millimetre wave spectrum.

Hence, the moratorium we request is necessary to assure the safety of *all individuals* who reside in Canada and suffer illness or impairment from various RF-EMF exposures. Without such a moratorium, effectively these thousands of Canadians could be denied accessibility to their lives! It is my understanding that all levels of government in today's Canada willingly, graciously, and even enthusiastically accept the onus to assure and enhance accessibility for all Canadians by removing any existing barriers and by preventing creation of new barriers. We bring this new barrier to your attention, and we urge you to do whatever it takes to respect and serve *all* Canadians.

This is the 21st century, when so much is technologically and humanly possible. Therefore, it would be absurd for any Canadian entity to suggest that a full range of degrees of electromagnetic hygiene and reduction of electromagnetic pollution is not doable. [We take this opportunity to remind you that as built environments in Canada have progressed, there are plenty of real-world examples where decisions and actions to fulfill specific individuals' accessibility needs lead to significantly and permanently enhanced environments for generally *all* Canadians—ramps rather than only stairs, plain-language policies, non-smoking areas (first at hospitals), pesticide bans or buffer zones...

And it would be absurd for any 21st –century Canadian to suggest that knowingly imperiling thousands of Canadians would be the right thing to do.

EPIC respectfully requests, in the strongest humanitarian terms, that a moratorium be placed on the deployment of 5G bandwidths and associated infrastructure until safe places are provided for persons made ill by acute and/or chronic exposure to radiofrequency electromagnetic fields (RF-EMF).

We thank you for this submission opportunity, and we welcome continued and dialogue.

Sincerely,

Barbara Payne, President
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energycanaries@gmail.com (please email for phone contact)

cc:

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