

## **Oral Statement**

of **Dariusz Leszczynski**, PhD, DSc

**for the meeting of the Standing Committee on Health**

**of the House of Commons of Canada**

**on April 23, 2015**

My name is Dariusz Leszczynski and I am currently Adjunct Professor of Biochemistry at the University of Helsinki in Finland. I do research in area of biological and health effects of cell phone-emitted radiation since 1997. I will briefly present now, what I said in a slightly more detailed form in my submitted document.

When scientific evidence is unclear, contradictory or ambivalent, careful and unbiased interpretation of it is of paramount importance. However, as it is often the case, such scientific evidence gives a room for a diverse interpretation that may lead to development of contradictory expert opinions, causing confusion impairing development of rational recommendations aimed at protecting the general population.

This is the current situation in area of cell phone- and wireless communication-emitted radiation. Unclear experimental evidence led to polarization of the scientific opinions into two extremes: “no-effect-opinion” and “harmful-effect-opinion”.

Currently, scientists do not agree in the matter of biological and health effects of radiation exposures. Term “consensus” might be misleading for the general public. We should rather speak about differences in scientific opinion.

Recent comment by the Head of the World Health Organization’s EMF Project, Dr. Emilie van Deventer well describes the current situation and I quote her comment given for the [‘The Daily Princetonian’](#) : *“There is no consensus, it’s true. There’s a big group and a little group, but it’s still two groups.”*.

Talk about a “big” and a “small” group is a pure speculation because the size of the groups was never examined. From my nearly 19 years’ experience in this area of research, I know that the vast majority of the scientists do not take openly a side in the debate.

Interpretation of scientific evidence by the committees is of most use for the decision makers.

This is the reason why development of unbiased opinions by committees, are of paramount importance.

Opinions of committees are defined by the expert composition. In ideal committee, experts would not have conflict of interest issues and would be independent of any kind of lobbying and only science would matter.

Nearly all the committees dealing with health effects of radiation emitted by wireless communication devices have a problem of biased expert selection, potential conflict of interest and/or potential influence by an industrial lobby, which may occur in spite of set up “firewalls”.

The majority of the committees consist of scientists having the same expert opinion. Individual committees’ experts commonly do not reflect all current scientific opinions.

This concerns both, international committees and national committees.

This includes the committee in Canada that provided evidence for Safety Code 6

The composition of the Health Canada expert committee was clearly biased towards the “no-effect-opinion” and some of the experts are known to advise/consult the telecom industry. This is a serious potential conflict of interest.

The above mentioned system of “firewalls”, to protect experts from influence of industry, does not work. Industry sponsors know who receives funding; sponsored scientists know who provides funding.

This is especially worrisome when the influential ICNIRP committee is in part funded by the industry through “firewall” of the Royal Adelaide Hospital in Australia. ICNIRP experts know very well that if the opinions of ICNIRP will be unfavorable for the telecom industry, the sponsorship may end. The “firewall” is only a gimmick.

Currently, WHO EMF Project is preparing evaluation of the scientific evidence concerning health effects of radiation emitted by the wireless communication devices – the so-called ‘Environmental Health Criteria for RF-EMF’ (EHC). The major problem with the draft document of EHC is the lack of balanced presentation of the scientific evidence. EHC draft was written solely by scientists with “no-effect-opinion”.

Environmental Health Criteria document will have a global impact on billions of users of wireless technology and on the multitrillion dollar business. This is why it is very disturbing that preparation of such a document is solely reflecting opinions of ICNIRP, an organization with firm, single-sided, “no-effect-opinion”.

This is a very disturbing situation where one group of experts is given preferential treatment only because of their “close link” with the WHO and where other relevant expert opinions are deliberately and arbitrarily excluded without scientific debate.

Recommendations, for decision makers, developed by committees where memberships are consistently biased towards either “no-effect-opinion” or “harmful-effect-opinion”, are not representative of the whole currently available scientific evidence and should be viewed with extreme caution or outright dismissed until the proper, unbiased evaluation takes place.

To my knowledge, there was only one scientific committee, IARC Working Experts group in 2011, where the full scope of diverse scientific opinions was represented. IARC classification

completely disagreed with the one-sided opinions of the majority of international and national committees, including Health Canada.

Until an unbiased, round-table, scientific debate takes place, where all scientific opinions will be duly represented and evaluated, the opinions developed to date by various international and national committees, based on biased expert selections, should be dismissed by decision makers as insufficient.

According to the document of the European Union, from year 2000, on Precautionary Principle, there are three criteria that need to be fulfilled in order to implement Precautionary Principle, and all of them are currently fulfilled:

- #1 – Scientific information is insufficient, inconclusive, or uncertain – this is exactly what says IARC classification of cell phone radiation as possible carcinogen (Group 2B)
- #2 – There are indications that the possible effects on human health may be potentially dangerous – increased risk of brain cancer in long-term avid users is a dangerous outcome; shown by three replicates of epidemiological studies (European Interphone, Swedish Hardell and French CERENAT)
- #3 – Effects are inconsistent with the chosen level of protection – epidemiological studies, showing increased risk in long-term avid users, were generated in populations using regular cell phones, meeting all current safety standards; this means that the current safety standards are insufficient to protect users because risk of developing cancer increases in long-term avid users.

Opponents of the Precautionary Principle need to understand that precaution does not equal prevention of use of wireless technology. Requirements to develop more efficient, less-radiation-emitting, technology and further biomedical research on radiation effects will create new knowledge through research and will create new jobs in research and technology. Implementation of the Precautionary Principle will not prevent technological developments. Claims by some that the implementation of the Precautionary Principle will cause “economic stagnation” are unfounded.

In the current situation, of inadequate review of scientific evidence by groups of scientists with biased selection of members, and until the round-table, unbiased review is performed; decision makers should implement the Precautionary Principle. The reason is not because the harm was proven beyond doubt but because the harm is possible and evidence is uncertain, and suggesting that harmful health effects are possible.

The Precautionary Principle was developed just for such a kind of situations where scientific uncertainty with concomitant indications of possible harm requires society to wait for more scientific evidence.

Saying, “better to be safe than sorry” applies here.