

# International Commission on the Biological Effects of Electromagnetic Fields

- Commissioner -

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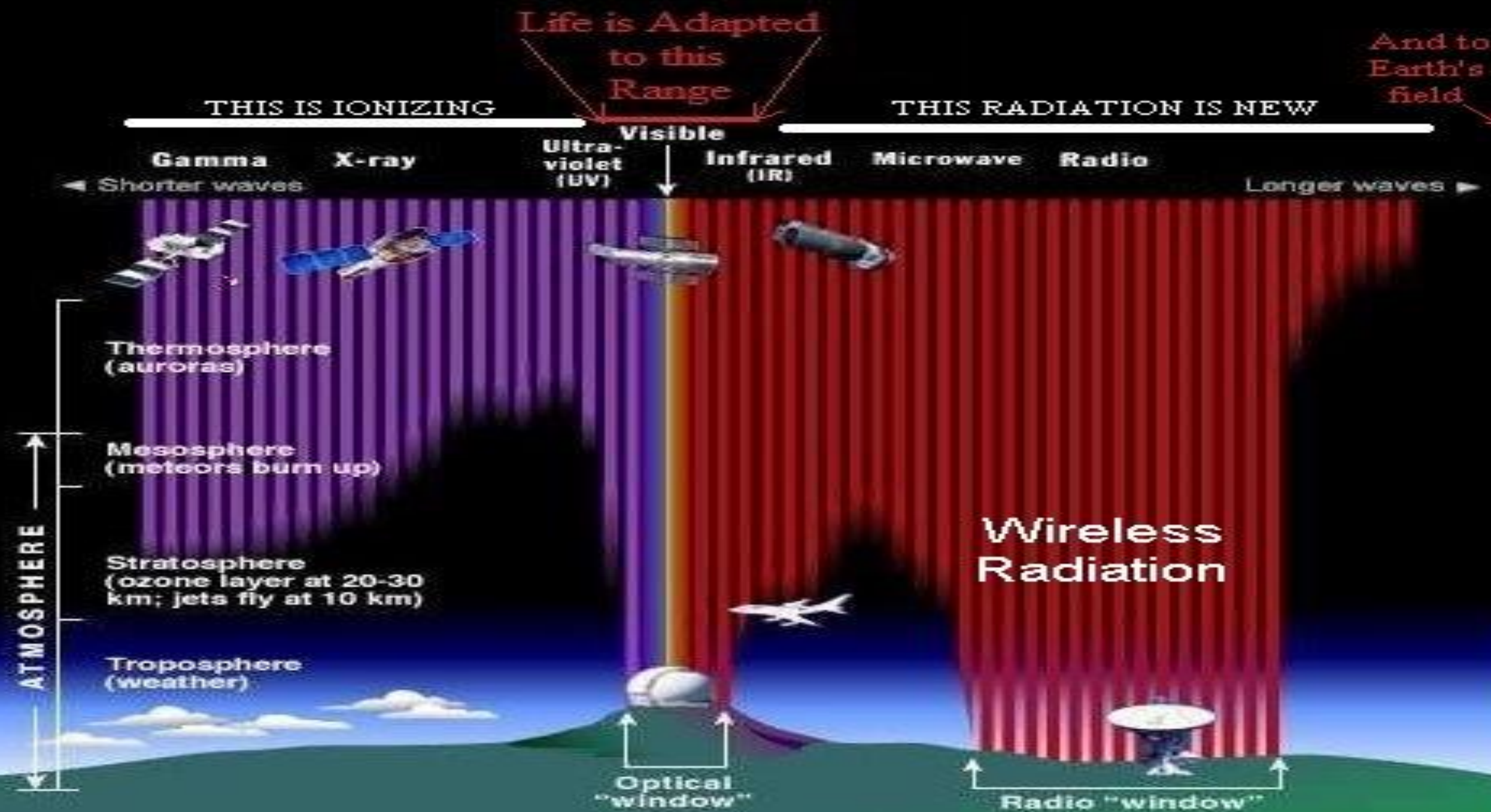
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In their “scientific” analysis of the health effects of Extra-Low-Frequency or Radio-Frequency Radiation, the Institute of Electrical and Electronics Engineers (IEEE) and the International Commission on Non-Ionizing Radiation Protection (ICNIRP) go only as far as required to provide superficially defensible arguments to the public. Because of their size or influence, these organizations have been able to convince many governments, particularly in the West, that non-ionizing radiation is inoffensive.

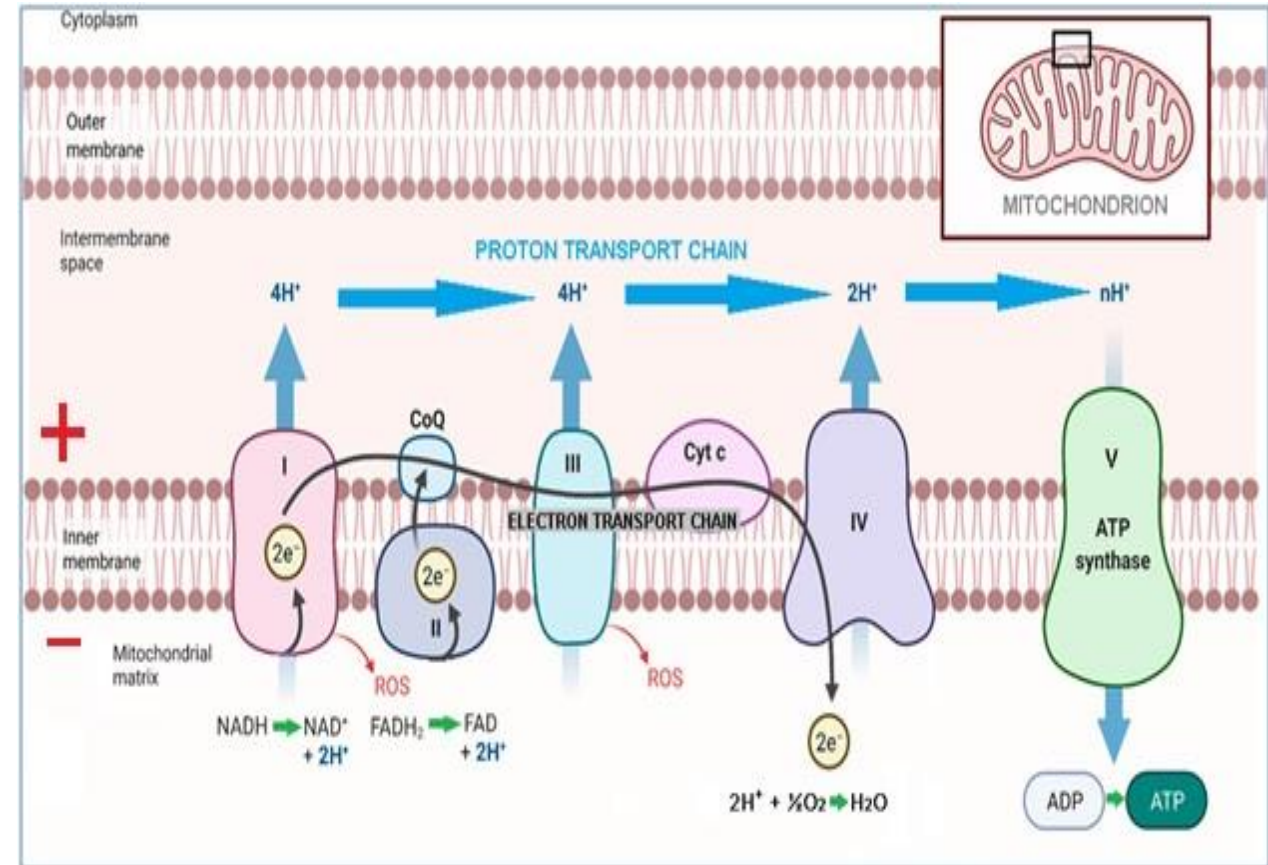
IEEE-ICNIRP’s arguments are two:

1. Non-ionizing radiation cannot extract electrons from atoms, and so cannot involve any important risk.
2. Any effect of non-ionizing radiation would be overwhelmed by molecular thermal motion, so unless heat is involved, non-ionizing radiation is inoffensive.

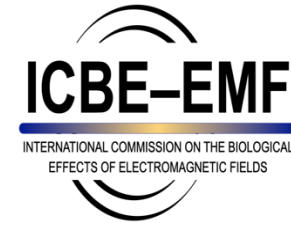
The fact that environmental ELF and RFR are non-ionizing, nor that their levels are low preclude ELF/RFR action on living systems.

This misconception results from inadequate knowledge of chemical thermodynamics, and ignoring the structures of living systems.

Non-ionizing radiation acts by direct action on electron and proton currents. IEEE transformed risk assessment into a calorimetric exercise on inert materials, while ignoring the processes and structures of life, specifically the motion of electrons and protons in metabolism, and the properties of protein and enzymes.



In the ICBE-EMF article



## Cell Phone Radiation Exposure Limits and Engineering Solutions

<https://doi.org/10.3390/ijerph20075398>

we point out

**Blind Spot #1** illustrates IEEE-ICNIRP's focus on heat, limiting acknowledgment of "real" health effects to the acute, rejecting all other mechanisms.

**Blind Spot #2** inappropriately extends the significance of short tests to chronic situations (75 years).

**Blind Spot #3** averages RFR exposures over times much longer (6 and 30 min) than the pulses of telecommunications signals, ignoring fast and sensitive biological reactions that occur at peak intensities which are entirely missed by averaging.

**Blind Spot #4** denies the real suffering that EMR exposures induce in human populations such as increased tumor rates, diabetes, neurological diseases, reproductive hazards and electromagnetic hypersensitivity, as well as the environmental effects of EMR.

**Blind Spots #5, 6, and 7** illustrate that homologation procedures for cellular phone SARs such as distance to the head, 1 or 10 g cubes, and simulations are not representative of even the thermal risks accepted by IEEE-ICNIRP.