

This is a submission to the NPPF consultation and is on behalf of ACHES – Adult Child Health and Environmental Support. ACHES was set up to promote, enhance and protect human and environmental wellbeing.

The key point that ACHES would like to make to the government is that ICNIRP guidance should be removed entirely from the NPPF because it is based on flawed science. This guidance is not reliable as a mechanism for protecting public health in the area of 5G and related technology.

ICNIRP flawed science is founded on a metric primarily based on heating effects, SARS, (thermal effects) and it is known that drivers for serious illnesses such as cancer are most often non thermal.

A clear illustration of this comes from the telecom industry itself, through a patent application made by the prominent Swiss telecom company Swisscom. Details are attached but the salient section is set out for you here:

“These findings indicate that the genotoxic effect of electromagnetic radiation is elicited via a non-thermal pathway. Moreover aneuploidy is to be considered as a known phenomenon in the increase of cancer risk.

Thus it has been possible to show that mobile radio radiation can cause damage to genetic material, in particular in human white blood cells, whereby both the DNA itself is damaged and the

number of chromosomes changed. This mutation can consequently lead to increased cancer risk. In particular, it could also be shown that this destruction is not dependent upon temperature increases, i.e. is non-thermal”

This key point about non thermal effects was emphasised by a former chair of ICNIRP itself, Paolo Vecchia, who said the following:

“However, it should be stressed that at an international EMF conference in London (2008), Professor Paolo Vecchia, ICNIRP Chairman from 2004 to 2012, said about the exposure guidelines “What they are not”: “They are not mandatory prescriptions for safety”, “They are not the ‘last word’ on the issue”, and “They are not defensive walls for industry or others” (25).

For all RF-based non-thermal EMF effects, SAR estimates are not an appropriate exposure metric”

In addition, we know that the physics of the past says that you need colossal energy to release an electron in order for ionisation to occur.

New physics involving quantum field effects does not hold with this view. In the new physics we are talking about electron fields. An Electron Volt in joules: $1\text{eV} = 1.602 \times 10^{-19}$ - this is to the power of 10 to the minus 19 –and which is a very small amount of energy.

The ionisation table below is widely accepted, and you will see that O2 requires only 13.6 eV to become ionised

		Ionization Energy (eV) & Electronegativity																					
1		13.6 H 2.20																			24.6 He --		
2		5.4 Li 0.98	9.3 Be 1.57															8.3 B 2.04	11.3 C 2.55	14.5 N 3.04	13.6 O 3.44	17.4 F 3.98	21.6 Ne --
3		5.1 Na 0.93	7.6 Mg 1.31															6.0 Al 1.61	8.2 Si 1.90	10.5 P 2.19	10.4 S 2.58	13.0 Cl 3.16	15.8 Ar --
4		4.3 K 0.82	6.1 Ca 1.00	6.6 Sc 1.36	6.8 Ti 1.54	6.7 V 1.63	6.8 Cr 1.66	7.4 Mn 1.55	7.9 Fe 1.83	7.9 Ni 1.88	7.6 Co 1.91	7.7 Cu 1.90	9.4 Zn 1.65	6.0 Ga 1.81	7.9 Ge 2.01	9.8 As 2.16	9.8 Se 2.55	11.8 Br 2.96	14.0 Kr --				
5		4.3 Rb 0.82	5.7 Sr 0.95	6.2 Y 1.22	6.6 Zr 1.33	6.8 Nb 1.60	7.1 Mo 2.16	7.3 Tc 1.90	7.4 Ru 2.2	7.5 Rh 2.28	8.3 Pd 2.20	7.6 Ag 1.93	9.0 Cd 1.69	5.8 In 1.78	7.3 Sn 1.96	8.6 Sb 2.05	9.0 Te 2.10	10.5 I 2.66	12.1 Xe --				

The paper from the University Paul Sabatier, Toulouse, abstract attached, explains the microwave ionisation of hydrogen atoms as a result of quantum field effects confirming that the division between ionising and non-ionising radiation is artificial.

The new way of seeing ionisation is a relative change in field charge and such changes can occur at low levels of energy.

We can see now that the idea that you need huge amounts of energy to bring about ionisation is considered out of date and wrong as the table above shows.

The fiction of huge amounts of energy required to bring about ionisation is conveniently maintained, one might imagine, by those who wish to propagate an illusion about 5G being safe because it is never ionising radiation.

Many would say too that the whole of the ICNIRP non thermal approach is based on flawed science.

Furthermore 1 eV is defined by the energy attained by an electron (field) as it moves along a potential difference of 1 volt.

Now the ICNIRP so called safe level is 61 Volts per meter.

So as you breathe in air, the O₂ molecular field is going to move through the air and into your lungs through the ICNIRP potential difference of 61 Volts per meter.

It only needs 13.6 e V to ionise the O₂ molecular field, as you can see in the above widely accepted table of ionisation values.

When the ionised (or charged) air is breathed in, it then discharges itself inside the body and causes oxidative stress in the process - and oxidative stress is a known precursor of cancer.

The fact that all this can occur at well below the ICNIRP “safe” level, shows again that ICNIRP is unsuitable as a metric for public health safety.

Reference to ICNIRP should therefore be removed from the NPPF now that the government has been given full knowledge of the fact.

For a replacement of ICNIRP within the NPPF, ACHES would suggest the Council of Europe Resolution 1815 which sets 200mV/meter as the medium term measure of energy in air: 200 mV/meter is 305 times less than the ICNIRP so called safe level at 61 Volts/meter. UK is a founder member of the Council of Europe, not to be confused with the EU of course.

ACHES would also refer the government to an alternative organisation to ICNIRP, namely the ICBE- EMF: International Commission for Biological Effects – EMF.

This submission to the NPPF consultation should be widely circulated so that the public is aware of what is happening in this arena as it affects public health.

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For and on behalf of

ACHES - Adult Child Health and Environmental Support

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