



A-Thermal Effects are not accounted for by the Legal Limits

The current legal limits were established only considering thermal effects. According to new research, the more severe biological effects are caused by a-thermal effects.

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So far, non-thermal effects have not found their way into the international limits, apart from a few exceptions. If one observes the often unscientific polemics against non-thermal findings, it forces the suspicion that

"nothing can be here, that is not allowed".

The recognition of damage to health from the non-thermal domain has large consequences for the telecommunications industry, the conquest of new markets worth billions would inevitably come to a hold. This is even more relevant as the new D-network (also E-network) uses pulsed HF radiation, which has shown repeated non-thermal effects. It is unfortunate that in this country hardly any research funds are made available, so the question around non-thermal damages remains unanswered.

It is undisputed, that HF radiation above a specific power density heats tissue from inside and can lead to thermal damage. This includes:

**Disorder of metabolism (Hormonal system)
Disorder to the nervous system, (217 impulses per second)
Behavioural disorder (hyperactivity in children)**

Further risks:

Opacity of optical lens (clotting of the eye white, also in the testicles for men)

Special risk groups:

People with reduced heat regulation, older people and diabetics

The legal limits should limit possible local temperature increases at 0.5 to 1.0 degrees Celsius, especially in the head region (limit 10 W/kg professional and 2 W/kg in public). Telephones of the 7 Watt class can however, definitely exceed 2 W/kg. In the region of the head, levels of 15 to 35 W/kg must be reckoned for, i.e. an exceedence of 7 to 18 times the limit.

Known trials have shown a reproducible influence of mobile phone radiation on brain waves. The distance between the head and the antenna as well as the peak performance of the device do not appear to be the only affecting factors, but also very importantly the pulse and modulation frequency. Up to now, scientists do not know what exactly happens in the brain. At the very least it leads to changes in the brain waves!

In addition, changes to the blood structure are also detectable. The agglutination of erythrocytes (blood cells) lead not only to circulation disturbances with thrombosis and infarction risk, but also to reduced oxygen absorbance.