



# THE INVISABLE SMOG

Martin Schaufelberger





## The invisible smog

No one could have imagined back in 1926, when the German cartoonist, Karl Arnold, envisioned mobile telephone in his drawing "Wireless Telephony," that one day there would be more cell phones than people. In the meantime, 95 years have passed. Karl Arnold's vision has become reality, and there are over 8 billion cell phones in use worldwide. These 8 billion cell phones and the required transmitting stations produce a not to be underestimated



electromagnetic field that spans the globe, commonly known as electrosmog.

The term electrosmog originated in the early 1980s, but only became a concern after 1990, when the first mobile phone transmitting stations were installed. Electrosmog is made up of the two words "electro" and "smog." The word "electro" stands for electromagnetic radiation. Electromagnetic radiation is radiation consisting of waves in which electric and magnetic fields are coupled together. "Smog," on the other hand, is a term of art that originally described the dreaded London haze. Smog is a combination of the words smoke and fog and refers to the situation when fog is mixed with dirt, which can be harmful or even fatal to humans and animals. This was exactly the case between December 5 and 9, 1952 in London. At that time, fog was nothing unusual for London. However, this time, it was heavily mixed with sulphate and particulate matter, furthermore, there was no wind blowing. During the "Fog of Horror", as it was called at the time, over 4000 people died, and over 100,000 people were hospitalized for respiratory illnesses. How many animals died during the same period is unclear today, but it is estimated that tens of thousands may have died too.

Today, we all live in an invisible fog of energy and glide daily through our self-fabricated electromagnetic jungle, which becomes denser and denser every year. Generally, frequencies up to 100kHz are considered as low frequency radiation. It emanates, from electrical appliances or power lines with alternating current. High-frequency radiation concerns frequencies from 100kHz to 300GHz. In addition to mobile communications, this also includes radio and TV frequencies. The higher the frequencies, the shorter the transmitting range of the electromagnetic waves.



In the meantime, the electromagnetic spectrum, which our ancestors had almost empty, is now filled up with self-generated electromagnetic frequencies.

After the Second World War, the electromagnetic radiation growth, with the technology available at that time, was a moderate five to ten percent, which was fully turned up in the new millennium.

Today we have a clear connection with our Smartphones no matter where we are, and the many transmitters required radiate pulsed electromagnetic radiation 24/7. This radiation is silent, invisible, odourless, and not even tangible to most people. Nevertheless, the effects on humans, animals, plants, and the environment globally are devastating.

More and more people now suffer health problems from electromagnetic radiation in the low and high frequency ranges. According to official estimates between 1% to 5%, but could be over 30%, as it can affect everyone. The numbers about people who suffer health problems because of electromagnetic fields should be treated with caution, because electro hypersensitivity or microwave syndrome, was not diagnosed correctly to begin with. Many burn-out and ADD/ADHD cases, as well as a considerable number of depressive disorders, can also be caused by electromagnetic fields. Other complaints are headaches, migraines, tinnitus, fatigue, listlessness, sleep problems, hair loss, depression, tension, and fever, to name just a few.



## Technology development with an impact on human beings

Point in time	Event
1881	For the first time, it became possible to transport electricity over long distances thanks to alternating voltage. This laid the foundation for distributing electricity everywhere.
1918	Shortwave radio transmitters were used for the first time on a large scale, in various areas around the world.
1920er	Medium wave (MW) radio, often referred to as AM "amplitude modulation," came into the market.
1950er	<ul> <li>VHF radio, which operated on a higher frequency band and allowed better sound quality, was introduced.</li> <li>In the same period came the transmission of images in black and white. Television was born.</li> </ul>



Point in time	Event
1960er	The first colour televisions appeared on the market, as did the use of communications satellites.
1970er	The computer revolution and the birth of today's information technology began.
1980	The first commercial generation of mobile communications (1G), based on analog technology, came onto the market. The mobile communications era is launched.
1991	The second generation of mobile communications (2G) came onto the market. The first generation with digital technology.
1998	The third generation of mobile communications (3G) and access to the Internet entered the market.
2000er	After the millennium, the development accelerated and wireless transmission (WiFi) entered the market.
2008	The fourth generation of mobile communications (4G) came into the market. Here, the device became a mobile computer, and users were now able to view and transfer data online.
From 2020	Almost ten years later, the fifth generation of mobile communications was launched. 5G was designed to connect virtually everyone and everything together, including machines, objects, and devices.



## Is the "5G apocalypse" looming?

At first glance, the upcoming 5G mobile phone generation promises good things for many. Radio transmission almost in real time. But it uses a higher frequency band than before, which will allow up to a hundred times more data transfer than 4G. But the higher frequencies of this new mobile radio generation also conceal some dangers and only functions physically over shorter distances. For this reason, a much more closely meshed expansion of the radio network "device-to-device communication" is required. According to information, Germany will require up to 750'000 new transmitters to attain the required coverage. From this, one can quickly see that several billion 5G transmitters will be required to build up a worldwide network. This means that the radiation exposure for humans, animals and the environment will increase significantly, if not exponentially.

With the rollout, the transmitters will vehemently advance from the masts and rooftop locations into the streets and in front of the houses, and this worldwide. The stations will be installed mostly on street lighting and electricity distribution masts, as well as on bus stops, walls, and the like, so that we humans will inevitably come very close to the radiating beams, and you will no longer be able to avoid them. Although the transmission power may be lower than at the larger 4G mast and rooftop transmitters, the radiating emission exposures may be higher because of the shorter distance between the 5G transmitters. This can result in an exposure increase of a hundred, to thousand-fold.



Caption: Intelligent 5G Antenna's



In addition, 5G requires the introduction of a new form of smart antenna. The so-called dynamic beamforming. This type of antenna has a high directivity and focuses the radiation in the spatial area where the highest power is required due to capacity demand and path attenuation. Therefore, in certain areas the permissible emission limit values could be greatly exceeded.

This development is very questionable from an ethical point of view. After all, today's 4G has already shown that long-term exposure increases the risk of cancer considerably, as well as painfully noticeable effects for electrosensitive people. Both problems are likely to increase significantly with the new 5G standard. Not only for humans, but also for animals, plants, and our environment.

The World Health Organisation (WHO) classified mobile radio as a possible carcinogen as early as 2011. However, if one believes the limits set by the International Commission on Non-Ionising Radiation Protection (ICNIRP), mobile phones can be used safely without any health consequences. The ICNIRP is an institution that is financed by the private sector. Therefore, one can really ask oneself whether the ICNIRP represents our interests or those of the industry.

Based on new research by some experts, the risk of cancer from the planned 5G antenna models and higher frequencies is no longer classified as "possibly carcinogenic", but as "probably", or even "carcinogenic". We can only hope that more experts will get on board, and that mainstream research will soon recognise this.

Not only the many new transmitters equipped with beam-forming technology are a danger to humans, animals, plants, and the environment, but also the planned thousands of satellites in space.



## Is 5G mobile communications an ecological disaster?

Scepticism about 5G mobile communications is steadily increasing. More and more, people are seeing the one-sided interests for its implementation. The mainstream talks about a billion-dollar business, the networking of everything. Of course, this will also increase the danger of spying and possible manipulation, or is this desired? The corresponding dangers to human freedom have long been a topic of numerous publications internationally. There are even signs of an awakening regarding the threatening ecological consequences of the spread of 5G and the "Internet of Things" (IoT).



Caption: Is 5G mobile communications an ecological disaster?



## How does mobile phone radiation affect the body?

Tiny electrical currents flow in the human body, caused by the chemical reactions that take place as part of normal bodily function. For example, the nerves transmit their signals in the form of electrical impulses. Most biochemical reactions, from digestion to brain activity, are accompanied by a rearrangement of charged particles. Even the heart is electrically active. An activity that the doctor can follow with the help of an electrocardiogram.

The dangers of high frequency pulsed continuous radiation can cause biologically effective stresses that directly interfere with the biological regulatory system of humans and animals.

But what about the interaction of metals present in the body, such as amalgam fillings and replacement joints and plates made of metal? According to some studies, exposure to mobile phone radiation is a concern with amalgam fillings because the vapour release of mercury is increased by mobile phone radiation. Meanwhile, many people have extremely high levels of mercury in the nerve cells of the brain and spinal cord. These, highly toxic mercuries deposited in the cells, increase the influence of radio radiation, and can induce electric currents. It is possible that they can even cause the affected cells to heat up. The rise in the fatal ALS disease in the last 30 years, as well as the increased number of young people suffering from Parkinson's and Alzheimer's diseases, could possibly be linked to the toxic metals in the nerve cells and the increased radio radiation.

But what about metal parts in the body in general? Well here the evidence seems to be solid that metals in the body such as piercings, implants, metal dental fillings, or braces, to name a few, can amplify radiation by a factor of 400 to 700.

Like microwave radiation in a microwave oven, 4G mobile phone radiation at 2.6GHz causes water molecules to vibrate. This creates frictional heat and the temperature in the tissue and cells rises. And this is especially true when we use mobile phones. As soon as the mobile phone transmits and receives, the radiation penetrates the body.

And what about 5G? Well, should the planned 60GHz transmission frequency become reality, it may cause oxygen particles to spin, therefore rendering it impossible to be absorbed by living organism, which could cause damage, like suffocation.



The first transmitting stations operate in the frequency range between 3.6GHz and 28GHz. These are wavelengths of 8.3cm at 3.6GHz, or 1.13cm at 28GHz. A general guideline is: if the wavelength is shorter than the thickness of the wall, (almost) nothing passes through.



#### Caption: Physical disadvantage of wavelength

To get around this, it is planned to set up a close-meshed network of many small-cell transmitters, which will then also be mounted on residential buildings or in their immediate vicinity. Furthermore, a new type of antenna must be used. This so-called beamforming antenna is a type of radio wave. It describes so to speak, how a radio signal is shaped, through the use of several antennas and thus sent specifically to one point. In this process, an active antenna emits 64 signals in parallel, which can be individually controlled and directed towards customers. This means 64 receiving and transmitting elements to form 64 different beams. Instead of emitting a mobile radio signal in a circle, which becomes weaker and weaker at the edges, the signals can be directed in the form of elongated beams during beamforming. As a result, the beam is similarly strong in the peripheral area as it is in the centre. Since it requires a close-meshed network of many small-cell transmitters, you automatically get much closer to them and consequently you are also exposed to more radiation.



#### Impact on children

Children belong to a sensitive population group. Their development can be disturbed by a wide variety of influences. Their skull bones are thinner than those of adults. The outer layers of an adult head absorb part of the electromagnetic radiation. In children, the radiation penetrates much deeper into the brain. Among other things, high-frequency radiation also affects a person's brain wave.



Caption: Impact on children

Radiation exposure has increased massively in the last 20 years (3G/4G), and there are still no concrete long-term studies on how radiation affects children's development. As it can be assumed that radiation has negative effects on the growth of children, the further expansion of mobile phone networks near schools, hospitals and residential areas must be stopped.

The first 5G mobile devices are already on the market and operate on the 4G frequency bandwidth. As soon as the new transmitting stations with the higher frequency bandwidths (3GHz to 300GHz) are released, the radiation exposure on humans, animals, plants, and the environment will increase drastically.



#### What health effects could 5G have on us humans?

With 5G and the coming higher frequencies, the effects will become even more pronounced. These artificial fields create a completely non-biological and therefore harmful environment because the body's own vibrational field is completely out of control.

- At first, one feels lack of energy.
- If this persists, a functional stress symptom follows, in which, for example, certain psychological and physiological performances can no longer be fully provided.
- In the chronified form, structural changes occur, e.g., damage to tissue and organs.



Caption: Stress and lack of energy



With the roll out of 5G permanent stress will increase, as no one can escape from the electromagnetic radiation. Here some typical symptoms that can occur:

- Disruption of melatonin production in the pineal gland
- Increased oxidative (\*1) and nitrosative (\*2) stress
- DNA damage
- Gastrointestinal disorders
- Increased release of stress hormones
- Cardiovascular diseases and the associated impairment of the psyche, such as sleep disorders, depression, burn-out, ADS, as well as cancers



Caption: Depressions

(\*1) Oxidative stress occurs when our cells are exposed to certain oxygen reactions. The main cause of these reactions are the so-called "free radicals". Free radicals are atoms or molecules with at least one or more unpaired electrons.

(\*2) Nitrosative stress is the cause of multisystemic diseases with deficiency and poisoning symptoms due to aggressive nitric oxide radicals. Since nitric oxide can inhibit the enzymes of cellular respiration, there is a significant reduction in the energy production of the cell itself. The result is a disturbance of the magnesium-calcium balance in the cell. Amino acids and fats can no longer be properly utilised and energy production decreases. The respiratory chain of the mitochondria is blocked.



## 5G radiation from space: destruction of plants, birds, and fish

As soon as the planned, more than 20,000 satellites with a transmission power of up to one megawatt are positioned in space, the entire surface of the earth will be irradiated from above. The various ionosphere layers of the earth are electrically conductive. A microwave beam can be directed via these ionising layers to all objects in the immediate vicinity, e.g., trees, buildings, crop fields and people.



Caption: 5G radiation from space



## WLAN radiation influences the growth of cress

Students from a ninth-grade class in Jutland, Denmark, aroused international interest with an experiment on the effects of WiFi radiation.

Professor Olle Johansson from the renowned Karolinska Institute in Sweden showed great interest in the Danish students' experiment. They had the idea of exposing cress seeds to WLAN radiation and observing their growth behaviour. To do this, they prepared 12 plates with 400 cress seeds each and divided them into two groups. Six plates were exposed to the radiation of a WiFi router, the other six plates were placed in a room under the same heat and light conditions, but without WiFi radiation.

The results are striking, as you can see from the pictures below.



Caption: With WiFi radiation



Caption: Without WiFi radiation



## Effects on birds

Birds and insects orientate themselves in the air by means of electrical signals. A bat, for example, emits sound waves to estimate the distance to the next solid object. If the earth is now covered with 5G radiation, flying animals and insects will be deprived of their vital properties. They will no longer be able to orientate themselves or reproduce, because mating will only take place outside the radiation.



Caption: Effects on birds

## Effects on fish

At first glance, fish and trees have little in common. However, at a second glance, they are dependent on each other. In autumn, for example, the leaves of the trees fall into the lakes and rot. This creates valuable biomass, which is the food basis for the fish. If you poison the trees with 5G radiation, you also deprive the fish of their livelihood.



Caption: Effects on fish



## 5G - Radiation can trigger earthquakes and change the weather

Depending on the angle at which a beam hits a surface, it either passes through it or is reflected by it. If radiation waves in a certain wavelength become larger and larger, standing waves are built up. These are mathematically and physically capable of causing earthquakes.

They can also change the weather by altering jet streams or warming the atmosphere. The earth moves in cycles. There is an ocean cycle, a carbon cycle, a rock cycle, etc. Dr Barrie Trower points out in his interview that these cycles are being altered by 5G radiation. It requires just one cycle to be disturbed, to impact all the other cycles, because on earth everything is interconnected.



Caption: Weather influence



## 5G and the impact on our technology

It is quite possible that the new 5G frequencies will not only have a strong impact on humans, animals, and the environment, but also on our technology, such as measuring devices, life support systems in hospitals, pacemakers, car electronics etc.

The aeronautics authority in France is already warning on the risks from 5G mobile transmitters, in that the signals could interfere with altitude measurement systems, especially during landing.



#### Caption: Aircraft landing

The altitude of an aircraft is determined on the one hand by measuring air pressure, and on the other hand by an on-board radar device and electromagnetic waves. With these radar altimeters, the DGAC (Directorate General for Civil Aviation) now sees the risk of interference from 5G. At the end of last year, around 8600 5G stations were put into operation in France. The DGAC explains that they have monitored and regulated the positioning near airports to reduce potential risks. The power of the antennas also had to be reduced near 17 airports.



## Final thoughts

If nothing is done, it can be assumed that a renewed, seemingly uncontrollable proliferation of mobile phone transmitters will occur. It should also be clear to any serious ethicist, in view of the scientific inconsistencies, to advocate a 5G moratorium, so that the desired nationwide coverage, i.e., radiation with the new transmitters are not implemented for the reasons outlined.



## Studies on electrosmog

#### Does mobile phone radiation cause cancer?

Some studies by the "Agency for Research on Cancer" have already identified electromagnetic radiation as a possible carcinogen.

To the study:

#### https://www.spandidos-publications.com/ijo/43/6/1833

#### Pain due to radiation

Many people complain of unexplained headaches or stinging in the limbs. What are the causes, this study investigates the connection?

#### To the study:

#### http://ieeexplore.ieee.org/document/7951998/?reload=true

#### The effects of electromagnetic radiations to bees and flowers

An American study on the pollination of flowers, shows how sensitive natural organisms react to electromagnetic impulses.

#### To the study:

#### https://link.springer.com/article/10.1007%2Fs00359-017-1176-6

#### *Is embryo growth affected by electromagnetic radiation?*

To test the effect of cell phone radiation on natural processes, another American research group exposed pregnant mice to artificial produced electromagnetic radiation and observed the growth of the embryos.

To the study:

http://www.sciencedirect.com/science/article/pii/S0890623816301551?via%3Dihub



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