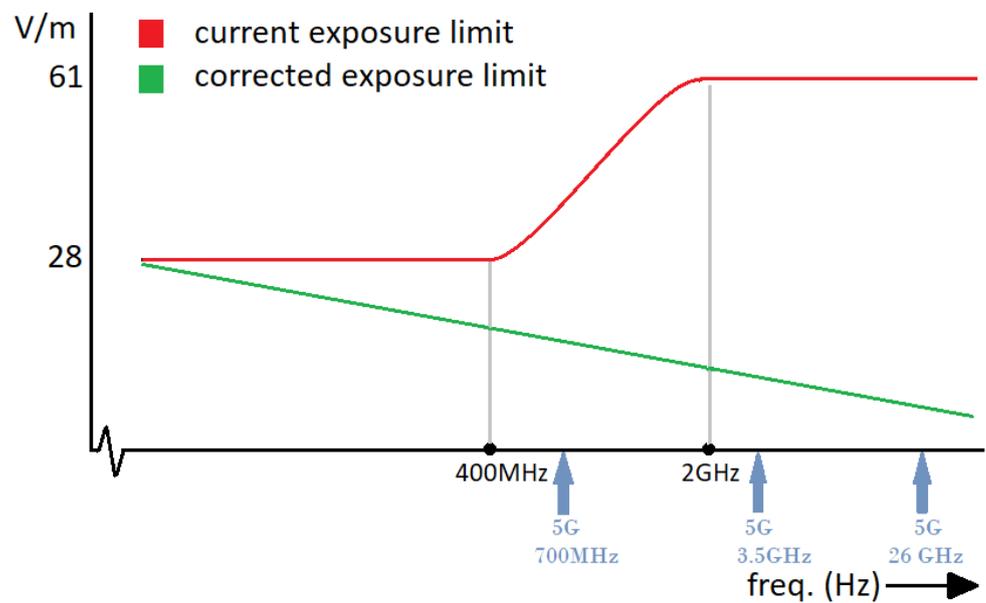


2021

Dangerous errors in the exposure limit for the radiation from mobile communication.



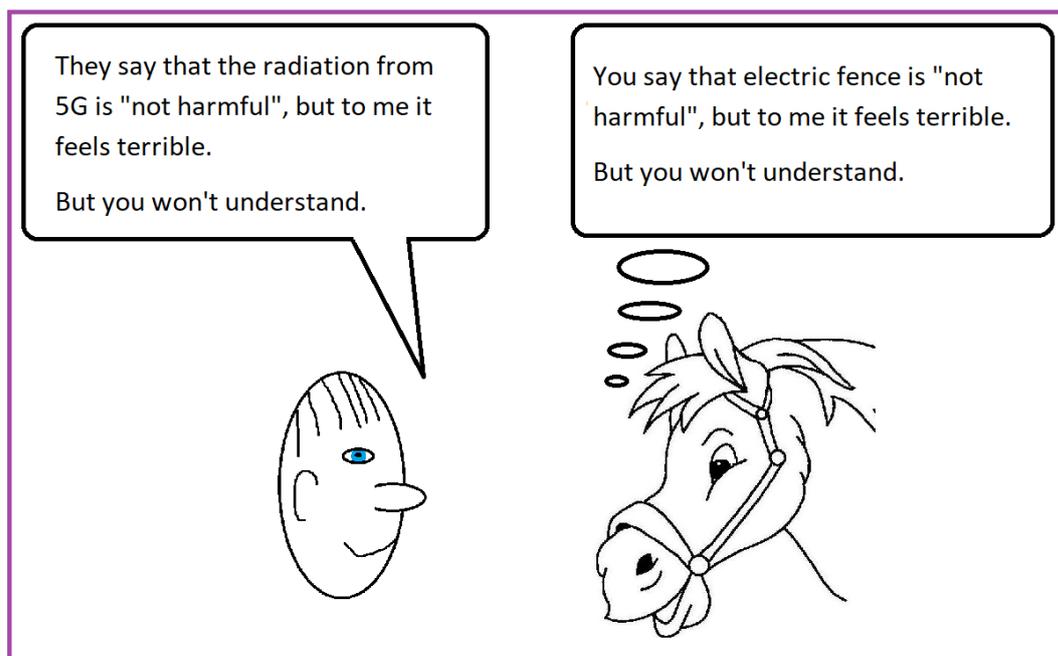
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1 Introduction

An exposure limit has been set for the radiation from mobile communication by the ICNIRP, a private international commission. The governments of most countries have based their policy on this limit. However, the current exposure limit is not correct as will be demonstrated in this report. The report will not address the usual criticism of the method used to determine the limit (thermal effects from radiation - on a plastic head filled with salt water - during 6 minutes). Now we will look at the existing limit with a new perception. The inaccuracies will be demonstrated on the basis of physical laws combined with common sense and statements from the (Dutch) government.

In addition, the exposure limit is determined at the measured values, but is the energy of the measured radiation the same as the actual energy?

The purpose of this report is to demonstrate that the government is using wrong assumptions and thereby deliberately committing a crime against humanity.

This translation of a Dutch report is adjusted just a little to make it more understandable for people all around the world.

2: Law of Conservation of Energy

In physics there are some laws that **always** apply. One of these is the Law of Conservation of Energy. In short, this means that energy can never just disappear. The energy is retained in the form in which it exists, is converted to another form of energy or is stored. Energy that is not effectively used is called wasted energy. This is usually converted into frictional force, motion or heat.

The Law of Conservation of Energy forms the basis of this report.

3: Energy at higher frequencies

High frequency signals are used for mobile communication. In the future, even higher frequencies will be used.

The ICNIRP has indicated that at higher frequencies the radiation can penetrate less deeply into the body.

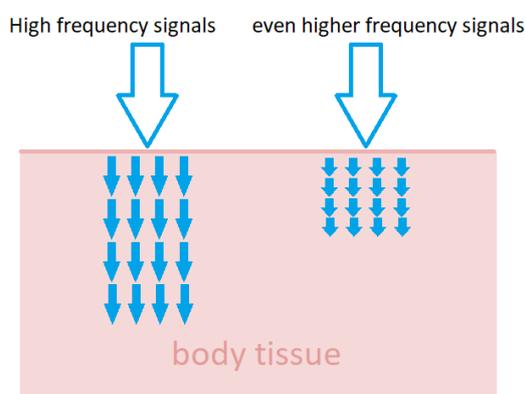


Figure 1: At a higher frequency penetrate less deeply.

When it penetrates less deeply, that means that the same energy is absorbed into a smaller amount of body tissue and is therefore more harmful to that part of the body.

The exposure limit determined by the ICNIRP is a field strength of 28 V/m at a frequency up to 400 MHz and then increases to 61 V/m at 2 GHz and above. This limit has been adopted by the government of The Netherlands and several other countries. (See the red line in Figure 2).

It is the energy per amount of body tissue that determines the damage. This quantity of energy must therefore remain the same for all frequencies.

Because at a higher frequency the radiation is absorbed by a smaller amount of tissue, the amount of energy per amount of body tissue will be higher at the same field strength. In order to keep the amount of energy per body tissue the same, it is therefore important that the exposure limit is lower at higher frequencies.

The exposure limit is much too high and this will be clarified in paragraph 6.1. Nevertheless, let us assume that the exposure limit at the lower (high frequency) frequencies would have been correct. Then the exposure limit must be lower at a higher frequency, such as the green line in figure 2. The ICNIRP increases the exposure limit at higher frequencies, such as the red line in figure 2. At higher frequencies this is much too high and therefore very dangerous.

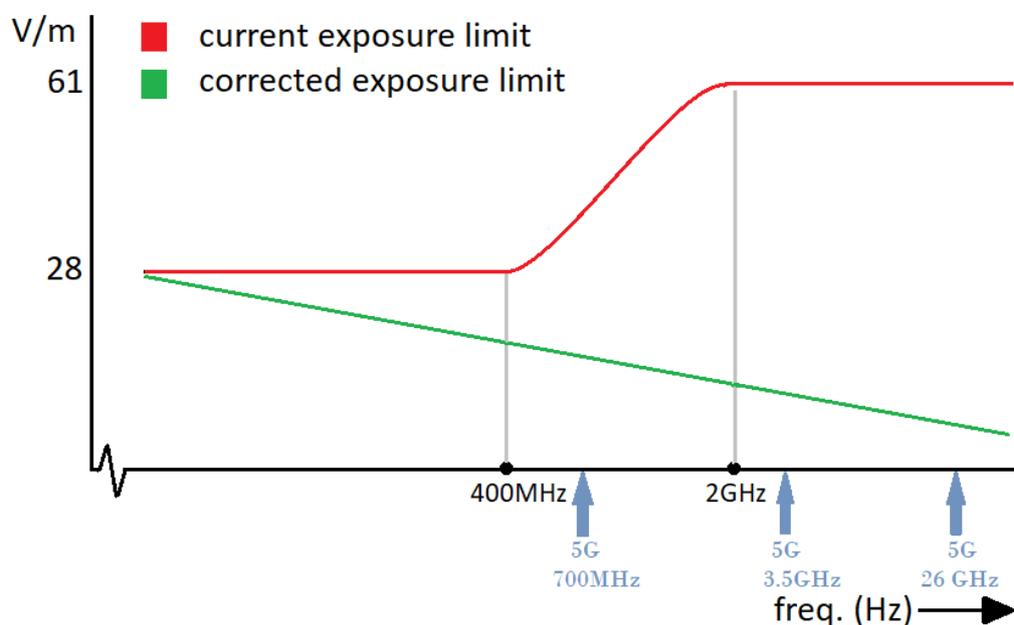


Figure 2: at a higher frequency the exposure limit should be lower.

In particular, with the 26 GHz for 5G to be auctioned, the exposure limit is therefore extremely high.

Sub-conclusion: When the frequency increases, the exposure limit should decrease. The government/ICNIRP is actually increasing the limit, creating an extreme danger to the human body.

Mr. van Rongen, at that time chairman of the ICNIRP, indicated that the high exposure limit of 61V/m cannot be lowered too much, because 5G cannot function properly. So if 5G will be brought into service with the higher frequencies, we will be way above the corrected exposure limit and this is not safe. His statement also shows that the exposure limit has not been established on the basis of health safety, but on the basis of technical necessity.

Sub-conclusion: If 5G will therefore be put into service on the higher frequencies, we will exceed the corrected exposure limit and will therefore be extreme unsafe.

4: Enforcement based on measured values

The exposure limit is based on measured radiation. This is a false premise. The reasons will be discussed below.

4.1: Distortion

People who suffer from radiation try to reduce the radiation in their home. They do this by covering the walls with shielding materials. When the measured radiation is measured as zero, radiation-sensitive people still seem to be able to detect the radiation. Let's see how this can be explained.

Various materials can be used as shielding. All materials have one of the following 4 properties:

- Permeable
- Reflective
- Absorbent
- Distorting

Of course, materials can also have a combination of these properties, but for the sake of simple explanation of the principle, let's forget the combination for a moment.

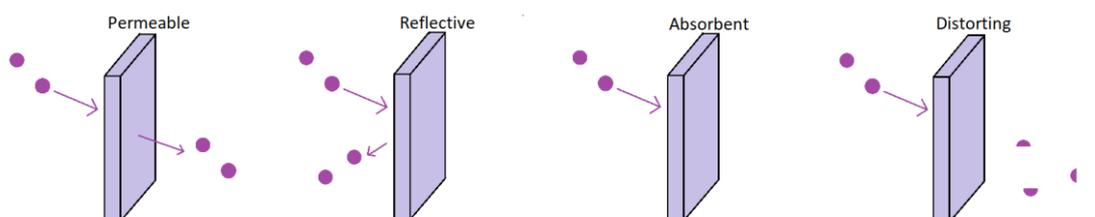
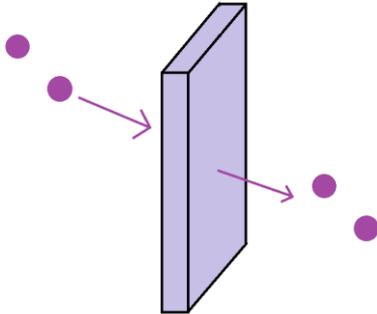
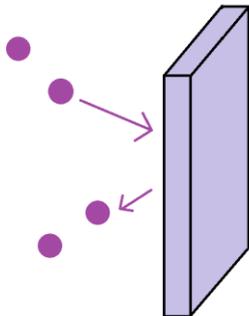


Figure 3: The properties of materials with regard to radiation

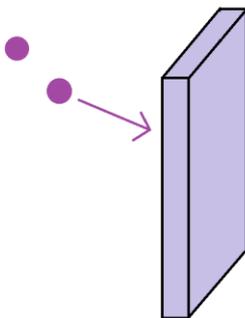
Let's pretend the radiation is a ball of energy. To make it understandable for everyone, we compare it with balls of hard butter. Now let's look at the 4 properties.



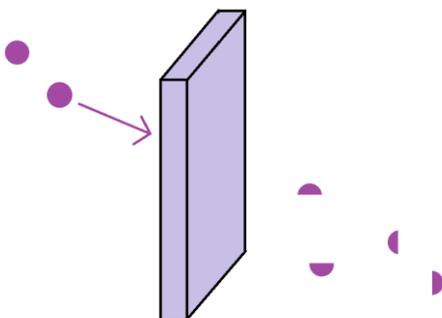
Permeable: For example, an open window: the butterballs can pass through. So all the energy comes on the other side of the separation.



Reflective: For example, a closed window: The butterballs simply bounce back. No butterball will get to the other side. So there is no energy on the other side of the wall.



Absorbent: For example a hedge: The butterballs don't make it to the other side, but they don't come back either. The balls get stuck in the hedge. The energy does not come back, but also does not pass through the separation.



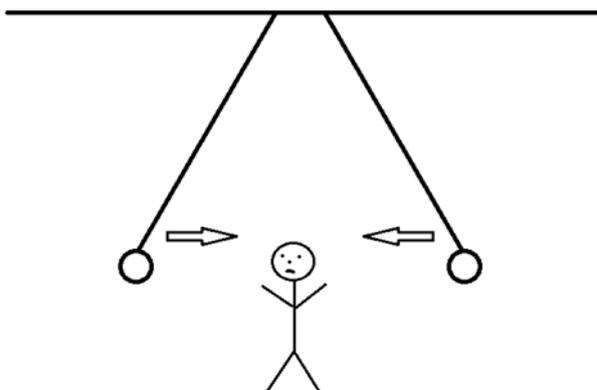
Distorting: For example, a partition with chicken wire: The butterballs are cut into pieces through the wire mesh. If you look at how many whole butterballs have arrived on the other side, it's zero. But the butter (= the energy) made it through the wall.

And it is that last option that is so interesting. If a radiation meter can only measure the intact radiation, it will measure NO radiation. However, the energy of the radiation does come through the separation. So you do get the energy from the butter balls all over you. This explains why with a measurement of zero, radiation sensitive people can feel the radiation.

Sub-conclusion: The exposure limit is based on the measured radiation. This is a biased approach as the exposure limit should also be based on the energy.

4.2: Extinction

One of the new techniques is beam forming. In beamforming, antennas are steered so the caller receives a strong signal, while elsewhere the signal is zero. This is accomplished by signals amplifying each other in the direction of the caller. In other directions the signals are opposite and thus cancel each other out. The radiation meter will therefore indicate zero.



Mathematically, two forces that are opposite may add up to zero, but for the person experiencing both forces, the force is twice as hard.

The energy of these two identical wrecking balls is exactly opposite at all times and therefore zero when added together. Do you dare to stand between these 2 wrecking balls?

Figure 4: Two Wrecking Balls of Opposite Energy

Sub-conclusion: With beamforming, the signals cancel each other out, but humans and animals do get the energy forced upon their bodies.

5: Danger as Basis for Exposure Limit

The exposure limit seems to be based solely on whether there is a health hazard based on mere heating. Although there is sufficient evidence that electromagnetic radiation can cause other health problems, this is denied by the government. The (Dutch) government cannot submit any report that makes the safety of the population plausible. All reports showing the danger are being denied by the government. The government thus states “the danger has not been proven”. The fact remains that there are far more reports actually proving the dangers than reports proving safety (if these reports exist at all). But is the risk to health the right criterion?

5.1: Harassment or torture

But even if the dangers were not proven, this is a wrong criterion. It is very easy to demonstrate that a rotten egg against your window or a glass of water in your face is not harmful to your health.

However, if a rotten egg is thrown against your window 3 times a day, that is definitely a form of taunting and that is not acceptable. If you have a glass of water thrown in your face every 10 minutes, it can be considered a form of torture.

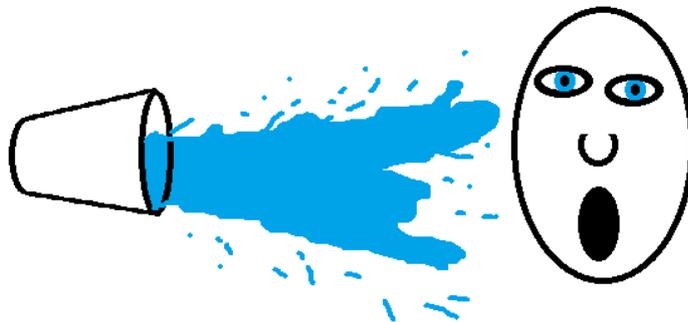


Figure 5: A glass of water in your face is "not proven to be dangerous". However, a glass in your face every 10 minutes will be considered torture and cannot be tolerated.

The exposure limit is based solely on whether the radiation poses a health hazard. Whether or not it is experienced as torture or harassment by the population is not a consideration. It is well-known that radiation-sensitive people experience radiation as severe torture. So even if it wouldn't be dangerous (which it is), it is experienced as torture and that means the government is violating several important human rights.

Looking solely at the health hazard is therefore a wrong starting point. The ICNIRP does not include health effects as a result of the stress caused by the torture.

Sub-conclusion: The exposure limit only considers whether radiation forms an immediate health danger. However, one should also take into account how it is felt or experienced by the population. And fact is that radiation from mobile communication is experienced as being torturous by a large group of people.

5.2: Painful or unpleasant

When someone rubs your arm, the feeling is not unpleasant in itself. (Okay, it kind of depends on who's doing it.) However, when someone rubs your arm with a wire brush, it's very painful and damages your skin. In the case of radiation, we would call this dangerous and the exposure limit for radiation would be based on this. If someone runs a feather or a hair over your arm, it is not harmful. In the case of radiation we would say it is extremely safe. But a feather repetitively brushing your arm can be very irritating and is experienced by many people as very unpleasant. And very light radiation is experienced as very unpleasant by a large group.

Sub-conclusion: The ICNIRP exposure limit only considers the upper limit, but not at the effect of very small signals.

5.3: Energy loss

The ICNIRP only looks at the effect of the radiation on people. It does not look at what happens to the unused energy.

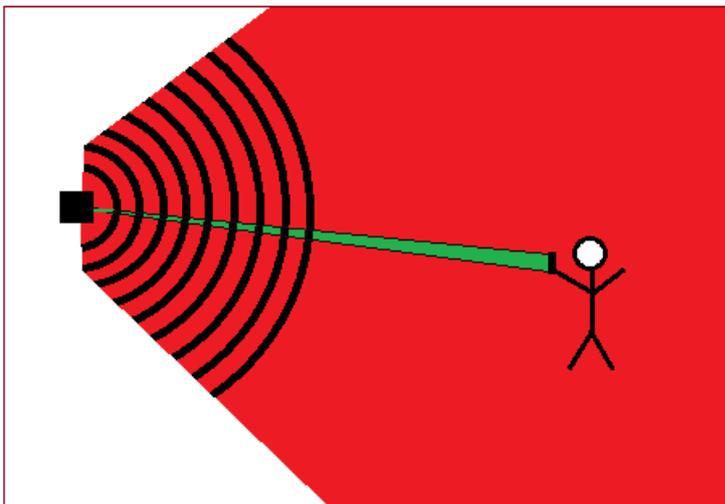


Figure 6: Less than 0.1% of the transmitted energy is used effectively. The rest is energy loss.

Only a very small percentage of the transmitted radiation arrives at the user with his mobile phone (green in figure 6). The reverse also applies: of all radiation emitted by a mobile phone, only a very small part reaches the antenna on the mast.

The unused energy (red in figure 6) will eventually bump into something (human, animal, plant, building, river,...) and be converted into heat.

You should turn down your heating 1°C to prevent global warming, while the allowed radiation can warm your body 1°C in 6 minutes. So it will certainly warm the earth.

Did you know Tesla invented radiation not to transport information, but to transport energy?

Sub-conclusion: More than 99.9% of the energy used for mobile communication is not used effectively and is therefore pure energy waste. Now that sustainability seems to be the goal for the coming years, there will be a lot to gain by reducing mobile communication.



6: Other inaccuracies

6.1: Government figures

According to the Dutch government site, in 2012, 5% to 10% of residents in neighboring countries were already affected by radiation. The Netherlands leads the way in connectivity, so it can be assumed that these numbers also apply to the Netherlands. After 2012, 4G and 5G were introduced, just like DAB + and power Wi-Fi. Various other applications using mobile communication have also been introduced or intensified.

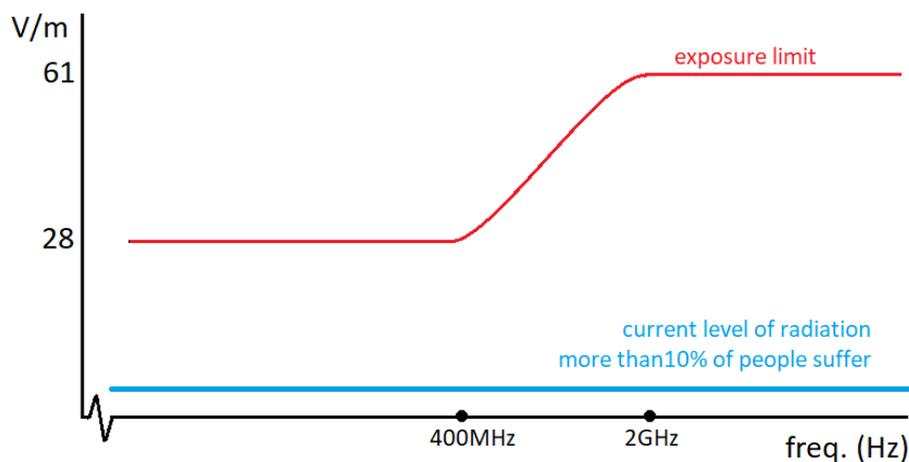


Figure 7: at the current radiation level far below the exposure limit, more than 10% of citizens suffer from health problems.

It is therefore very likely that with the current electromagnetic radiation, more than 10% of the Dutch population is affected by the radiation. In reality, it could even be much higher, because people do not link their complaints to radiation and they are misdiagnosed by doctors. This means that the exposure limit should be much lower than the current radiation level.

Looking purely at the numbers given by the government, it is very clear that the exposure limit is much too high. Yet our government is consciously ignoring the danger and the limit is set even higher.

6.2: Not all factors included

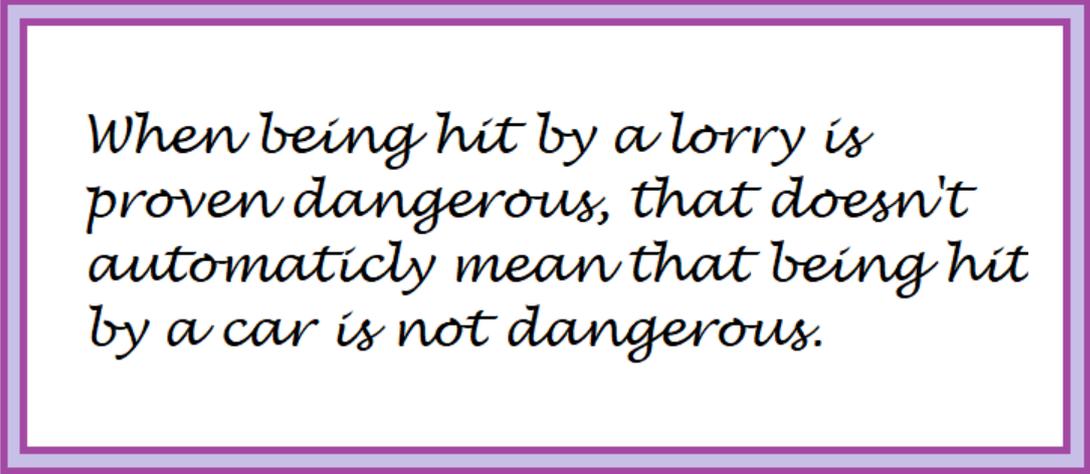
Furthermore, a signal of mobile communication is characterized by 3 factors:

- Frequency
- Amplitude
- Protocol (i.g. whether it is digital or analog)

The exposure limit depends only on the first two factors. The protocol (the shape of the signal) is not included in the limit at all. Various independent reports show that this does have huge effect.

6.3: Misconceptions

Another fallacy is the statement that non-ionizing radiation cannot be dangerous. It is a well-established fact that ionizing radiation is dangerous. This does not automatically mean that non-ionizing radiation is not dangerous. If that were the case I should be able to put the cat in the microwave. And high-voltage cables (above the ground) have also been recognized as dangerous for years in the Netherlands. Saying non-ionizing radiation is safe is a fallacy.



When being hit by a lorry is proven dangerous, that doesn't automatically mean that being hit by a car is not dangerous.

And so the entire policy on radiation from mobile communication is based on fallacies, omissions and lies. This may come across as clumsy and laughable, but these are deliberately made criminal misconceptions, the goal being to mislead. These misconceptions seriously damage our health and can therefore be seen as a crime against humanity.

7: Conclusion

The following conclusions follow from the above analysis:

- When the frequency increases, the exposure limit should decrease. The government/ICNIRP is actually increasing the limit, which creates an extreme danger to the human body.
- The exposure limit is based on the measured radiation. This is a biased approach as the exposure limit should also be based on the energy.
- If 5G will therefore be brought into service on the higher frequencies, it will be far above the corrected exposure limit and therefore be extreme unsafe.
- With beamforming, the signals cancel each other out, but humans and animals do get the energy forced upon their bodies.
- The exposure limit only considers whether there is an immediate health danger. However, one should also look at how something is experienced. The radiation from mobile communication is already experienced as torturous by a large group.
- The ICNIRP exposure limit only considers the upper limit, but not the effect of very small signals.
- More than 99% of the energy used for mobile communication is not used effectively and is therefore pure energy waste. Now that sustainability seems to be the theme for the coming years, there will be a lot to gain by reducing mobile communication.
- The entire policy regarding radiation from mobile communications is based on fallacies, omissions and lies. These are deliberately made criminal "misconceptions", which seriously damage our health and should therefore be seen as a crime against humanity.

The exposure limit is clearly not safe. Our government knows this and consciously chooses to expose its population to a dangerous dose of radiation. This is a crime against humanity.

8: Unimportant

It's not really important, but many people would like to get to know the author a little better to put this report in a better perspective. So here we go.....

Years ago I completed Technical high school (MTS) and College of technology (HTS) in Electrical Engineering. After that I worked for KPN, the Dutch telephone company. As a project manager I was responsible for building GSM (2G) in a part of the Netherlands. I coordinated the location acquisition, the buildings, cabling, equipment and building radiation towers and antennas.

Due to increasing health problems, KPN gave me a severance pay.

In the years that followed, I clearly suffered from radiation, but by turning off the Wi-Fi at night, I could live with it reasonably well.

During the panic of my divorce, I bought a smartphone (4G). Two days later, I felt something happening in my head and suddenly I had double vision. From that moment on I continuously felt there was something wrong in my head.

Nine months later I got my landline phone connection and fixed internet. My mobile was switched off and within a week the complaints in my head had disappeared.

From that moment it was clear to me that the radiation had kept me ill for 9 months. And all along it was classified as divorce stress by my doctors.

From that moment on I devoted myself completely into radiation matter. I have asked questions of the Dutch Ministry of Economics (responsible for mobile communication including 5G). I asked questions and had phone calls with board members, but never got real answers to my questions. Over a period of 15 months they made me wait 59 weeks which they themselves have validated. And to this day I still have not received a single report that makes the safety of the population plausible. Furthermore their report on complaint handling was full of demonstrable lies.

So I went to the National Ombudsman because I did not receive any report from the ministry that I asked for. It took the Ombudsman 5 months to research and then they agreed with the ministry, because they could find the reports. However, during a telephone conversation a few days later, it became apparent that the Ombudsman could not find them either. The result was not adjusted. Ignorance or corruption, I don't know. But my confidence in the National Ombudsman is now nil. We will have to fight it ourselves.

In the meantime, I am so bothered by the radiation that I have been living largely in a mobile home for over a year. I no longer have a safe place to live, lost half of my hair, too many health problems to find a job, I am constantly fleeing and have no form of income for 3 years (nor benefits).

I am currently training as a radiation measurement specialist, in order to be able to help other radiation-sensitive people, but also to gain knowledge to be able to challenge our government.

And yes, by calling this chapter "Unimportant" everyone hopefully read this chapter first.