Optimized 5G frequencies in favour of people, animals, insects, plants, soils and climate

Henk Kieft, July 2020 (www.emfscienceplatform.nl)

Additions by Hans Geesink (May 2020), and Walter Thut (July 2020).

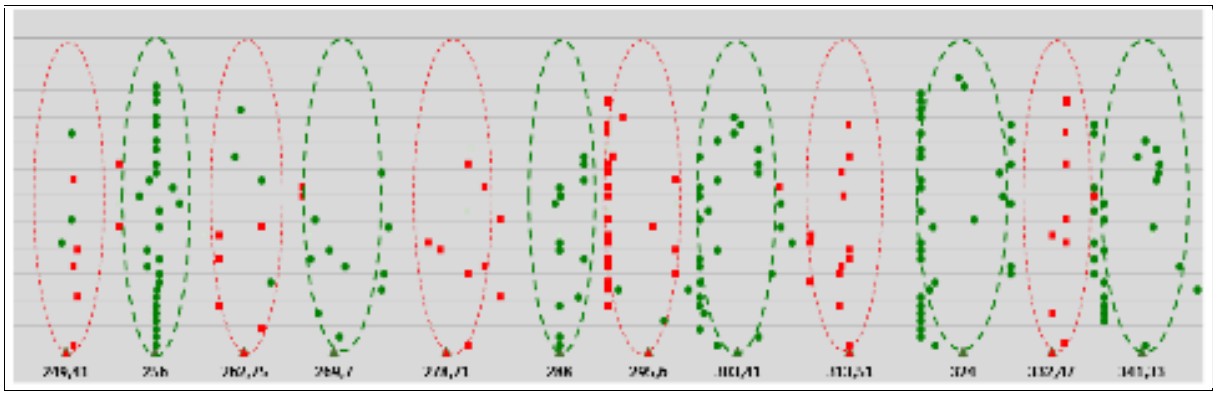
Summary

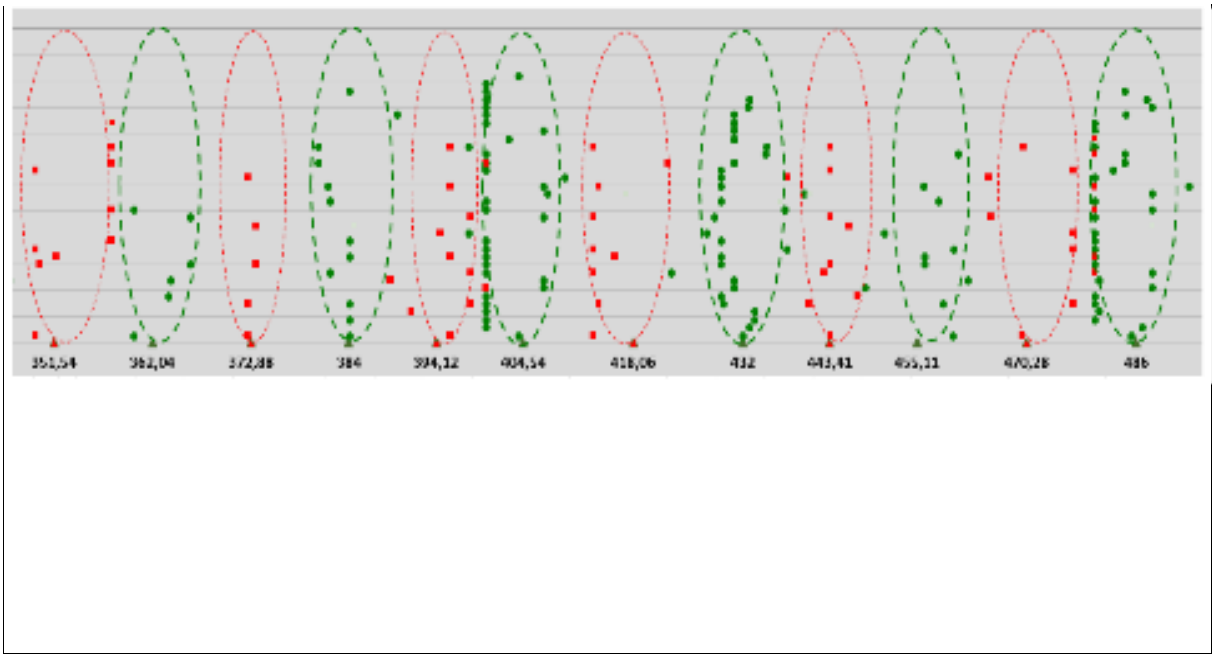
The proposed 5G frequencies in the Netherlands are not favourable for life processes in people nor in nature. The chosen carrier waves and associated modulations of artificial frequencies (for 3G, 4G and 5G) do not fit well with coherent frequencies that are favourable for life processes. Such a surprisingly coherent pattern of favourable frequencies in nature was discovered - independently of each other - by Thut and Geesink&Meijer.
Therefore, **the Dutch Science Platform EMF proposes to add to the 5G-signal** - composed of both decoherent and coherent frequency patterns - **some coherent frequencies less damaging for life, while not reducing the effectiveness of the 5G technology**.

In our attempt at optimizing 5G frequency patterns, we have based ourselves on **three different overviews of biologically healthy and unhealthy frequency patterns**. 1) the recent overview of scientific literature by Meijer&Geesink, 2) the fundamental frequency calculations of water technician Walter Thut and 3) the discovery of protein music by quantum physicist Joel Sternheimer.

1.Meijer & Geesink synthesized this overview in their 'Generalized Music' scale.

Such a synthesis has never been shown before. It offers an original insight **into the alternation of frequencies that turned out to be favourable and unfavourable in the life processes** that were studied. Their findings offer a relevant new insight in the reflections about the possible effects of 5G on human, animal and plant health.
Their GM-scale is based on more than **700 peer-reviewed scientific articles, investigating how various kinds of frequencies might affect physiological processes**. Their synthesis is striking in its clarity. The health effects of frequencies mentioned in these 700 articles apparently fit in a 12-tone musical scheme of basic frequencies. Their research concerns research into the effects of both single and compound frequencies. The diagram below summarizes their overview of healthy (green) and unhealthy (red) frequencies.





*Measured frequency data of living cell systems that are **life-sustaining (green points)** and **detrimental for life (red points)** versus calculated normalized frequencies. Biological effects were measured either following exposures to external frequencies or following endogenous effects of living cells in vitro and in vivo. The spectrum of frequencies apparently patterned in bands of Hz, kHz, MHz, GHz, THz, PHz range and the researchers have 'octaved' all frequencies into one octave in the audible domain.*

**The technique of 'octaving' is explained in the following text.*

2**. Walter Thut's frequency scheme of harmonic elements**.

Meijer&Geesink's synthesis appears to fit seamlessly with Thut's calculations. Thut elaborated on the quantum principle that every mass also has its own frequency. This is part of the so-called particle-wave duality, which you could label as the mass-frequency duality as well. He calculated the tones (which are frequencies) of all chemical elements in the Periodic Table of elements. That yielded his *Table with elements and molecules* below. For each element and its mass - and for several molecules with their mass - he calculated the frequency, using the method of quantum physicist Louis De Broglie. He combined the formulas $E=mc^2$ and $E=hf$. Both formulas concern the same energy-content E and can therefore be equated. This means that mass m and frequency f are in linear relation to each other: a twice as heavy element also has a twice as high frequency. As these calculated frequencies were quite different, he looked for a handy overview. He transposed all frequencies into one condensed octave. We know the octave from music theory, being a coherent interplay of frequencies. Thut, guitar player himself, was aware of a basic method in harmonic music called *octavating*. Every tone harmonizes with tones in double or quadruple frequency (so one octave or two octaves higher) and so on. Going to lower frequencies it works as well. Half or a quarter of that frequency are just one or two octaves lower. He divided the calculated high frequencies of the elements and molecules about 20

times by two (so he *octavated* them) until they fit in a diagram of a basic 12-tone octave in the audible domain, between 250 and 500 Hz. The figure below is the result of his *octavating*, the condensed octave. When Thut reflected on his findings, he was completely surprised. **All elements or molecules that are healthy for the human body coincide almost exactly with the precise frequencies of the 12 tones in an octave. Frequencies of all non-healthy elements, such as lead, lie in between the healthy elements.**

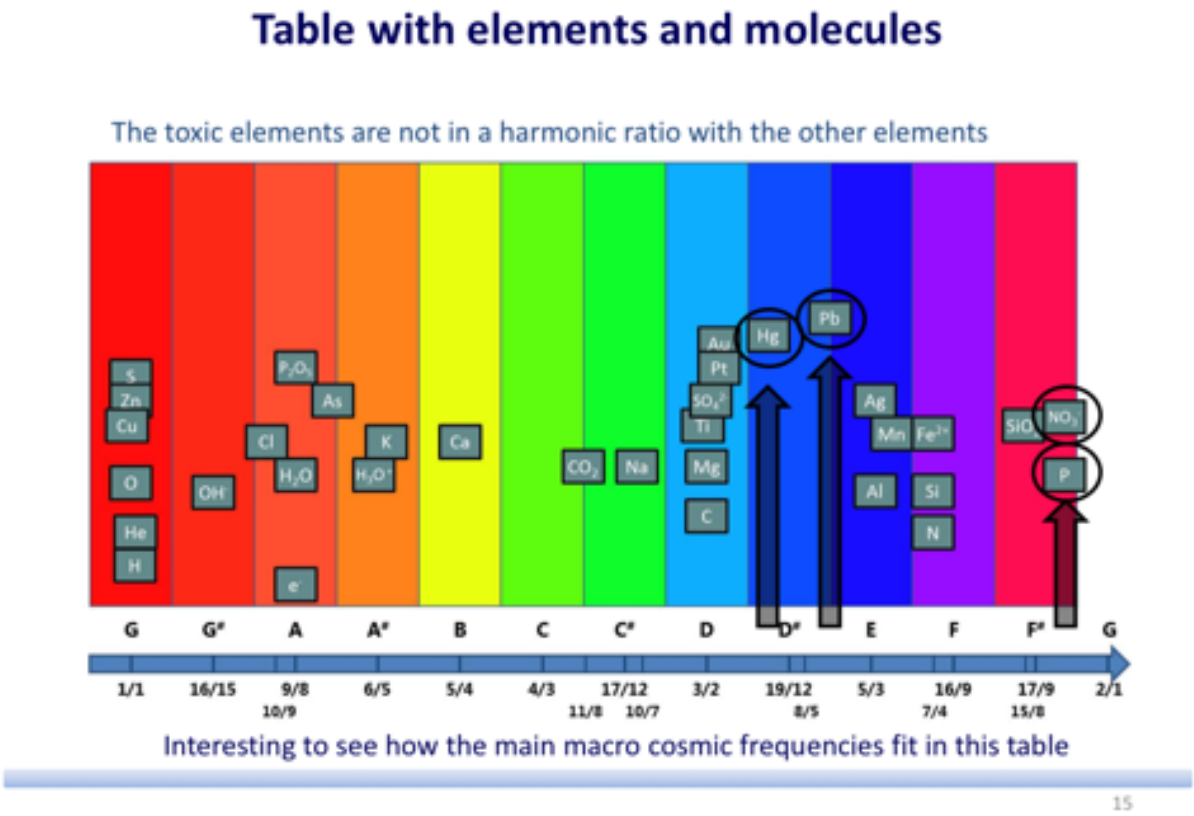
Thut also looked at optimal **combinations of frequencies**. He knows that tone-frequencies with a ratio of whole numbers sound really harmonic. This is always the case when standing waves resonate in the same space (in music this space means the same length of the tube of the saxophone or the string of the violin). Just as in music, pure chords - like a fifth or a third - also sound harmonic in nature, and what is significant for life processes, they reinforce each other. He applied this invention in his technique of DC (direct current) water treatment Aqua4D, which has proven in practice to be very successful. In this technique for water treatment he applied the frequencies of Oxygen (in G) and Carbon (in D) which together form a fifth – as shown below. With this technique he was successful in many countries. Plants absorb this water better, also plants in brackish soils. These positive effects of specific positive frequencies on processes in water – and in nature – support the validity of his discovery. It also underlines the suggestion that vibration or EMF-radiation not only has negative effects on nature, it may as well exert positive impact on water and plants. But for a healthy environment we have to understand the different effects of different frequencies.

3. Tuning the octave

Musicians in an orchestra always tune their instruments: the first violin sets its frequency and the entire orchestra tunes in to achieve its full harmony. The HET also requires a choice of its basic tone, the tone that serves as the anchor for the other tones in the octave. Thut tuned his Harmonic Elements Table (HET) on the base frequency G (381.1 Hz). He chose G as the anchor, because G includes the tones of Hydrogen and Oxygen, both essential elements in biology and in water. You'll find H and O - with some other elements - in the red bar G at the left. Tone G harmonizes perfectly with tone D, the tone of Carbon, the other essential element that combines with H and O into carbohydrates $C_xH_yO_z$. In addition, the frequency of several other important elements are located in D as well, like Magnesium Mg and Gold Au.

The exact tuning requires another important choice, the choice between an absolute, just or natural scale* and a tempered scale*. Whereas a tempered scale nowadays is used in most orchestras (with tone A set in 440 Hz) as a compromise to fit all instruments, Thut founded his HET-scheme on an absolute music scale. With 'absolute' scale tuning, the life-supporting elements all fit best at precise harmonic ratios to the main note G. For example in the ratio 3:2, but also on other harmonic ratios like 9:8, 5:4, 5:3 or 7:4. (In his scale tone A is found at 428.7 Hz, the tone of the electron and very close to the frequency of a water molecule as well). Thut suggests that this absolute tuning comes closest to harmonic frequencies in nature. Therefore, this 'just' scale serves best our intentions to harmonically support natural processes.

* *The difference between 'absolute' and 'tempered' scaling is explained in annex 1*



4. Comparison of the GM scale and the Harmonic Elements Table.

Let's now compare the GM scale of Meijer&Geesink with the HET table of Thut. **Almost all favourable frequencies of Thut correspond with the life-enhancing frequencies Meijer&Geesink have found in the scientific literature**. In the table below both frequency lists are put together. The very broad inventory of internationally published research reports by M&G and the discovery of Thut are clearly in line with each other. This fact strengthens the credibility of both approaches and it makes them even more **relevant for the analysis of possible effects of 5G frequencies on life processes**.

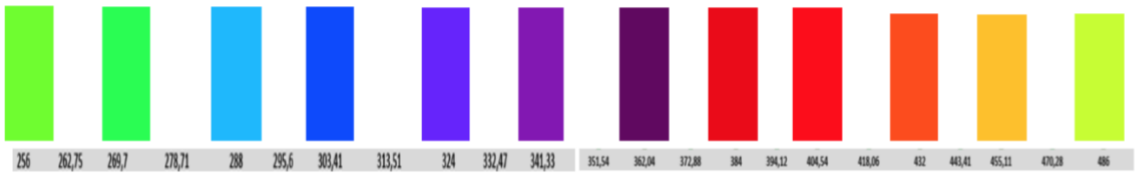
Pos. Freq. Thut in 'Just' scaling	Musical tone	Pos. Freq. M&G	Neg. Freq. M&G
			249,4
254.0	C4	256,0	
			262,8
269,9	C#	269,8	
			278,8
285,8	D	288	
			295,5
301,7	D#	303,1	
			313,4

317,5	E	324	
			332,5
338,7	F	341,2	
			352,8
359,9	F#	364,7	
			374,3
381,1	G	384	
			394,1
406,5	G#	404,5	
			418
428,7	A	432	
			443,2
457,3	A#	455,1	
			470,3
476,3	B	486	

Geesink compared the Harmonic Elements Table and the Generalized Music scale. He too noted a strong similarity: 1 frequency is the same, 3 frequencies deviate slightly over 1%, and 7 frequencies deviate less than 1%.
Thut noted in the findings of M&G that most measured data in note E are - slightly - below 324 Hz, namely around 318 Hz. The HET seems more accurate at this note E, however thereby confirming the findings from M&G. He also observed notes B are fairly far apart. Interestingly, also on this note M&G collected lots of positive effects slightly below 486 Hz, again a fact supported by Thut. In addition, there are also many “red” dots in this range of M&G. If you look at the HET, in this range we only find Calcium Ca. This could mean that this “note” is not so often present in organic systems.

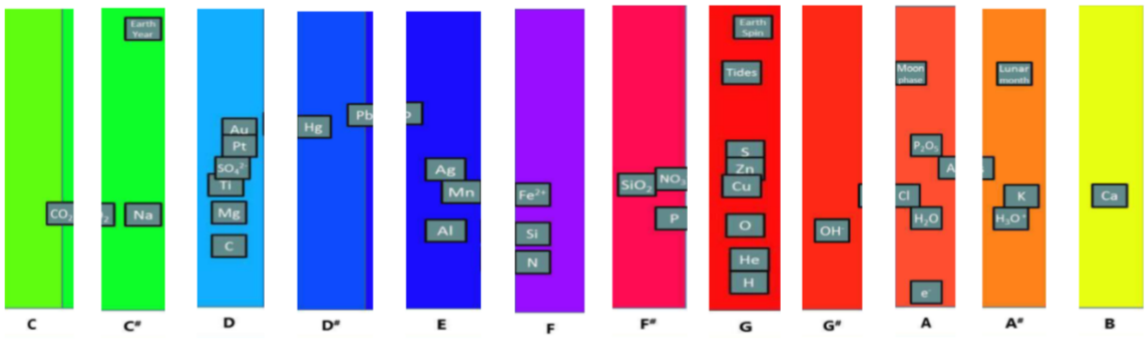
In addition, Geesink sets the optimal frequencies discovered - the 12 whole and half tones - of both approaches in the same order, but then starts - as is more usual with do-re-mi-… - with the C. The colour choices of both approaches are of course almost identical, because they are the 12 basic tones *octavated* up to the light spectrum. See both scales below.

GM-scale > semi-harmonic



532.5	505.6	473.4	449.3	420.8	399.5	376.6	710.1	674.0	631.3	599.1	561.0 *nm wavelength*
c	*cies*	*d*	*dies*	*e*	*f*	*fies*	*g*	*gies*	*a*	*ais*	*b* *tone scale*

Scale Walther Thut > partial harmonic



Tone scale

Both methods – following Louis de Broglie – are founded in the quantum formulas of Einstein and Planck. The resonance frequencies of the chemical elements are calculated by equating Einstein's $E = mc^2$ with Planck's $E = h \times f$. For example, the H-atom has a weight of 1,0080, the O-atom of 15,9994, so the oxygen-atom is 16 times heavier than the hydrogen-atom. 16 is the fourth power of 2, so the resonance frequency of oxygen is 4 octaves higher than that of hydrogen, but musically speaking it is the same note.

There is a slight difference though in the choice of basic frequencies. The typical frequency of a water molecule, with molecular weight M=18 gmol-1, is 54 Hz (resonating with note A in 432 Hz). Meijer and Geesink place this typical frequency of a water molecule at the centre of their GM scale. Thut puts note G at the centre of his HET-scale where a water molecule would resonate with 429,6 Hz.
The choice between a just or a tempered scale seems to be important for the exact choice of most healthy frequencies and requires methodical reflection. **What scale is nature playing on?** Would it be a tempered scale tuned at 432 Hz or a just scale tuned at 429,6 Hz.

5. Relevance of these findings for optimizing 5G-frequencies?

Our conclusion however is clear: both approaches, either expressed in the Generalized Music Scale or in the Harmonic Elements Table show identical results about life-enhancing and life-threatening frequency patterns. This conclusion raises the question of the significance of this thinking for the expected effects of fifth generation wireless communication 5G. How do these life-enhancing frequencies relate to the intended 5G frequencies?

The frequencies proposed for auction for the Netherlands are 700 MHz, 1,400 GHz, 2,1 GHz, 3,5 GHz and 26 GHz. Using the octavating method again, I also converted these very high transmission frequencies to the basic octave between 250 and 500 Hz.

When I compared these frequencies with the tables of Meijer&Geesink and Thut I found that **4 out of the 5 intended frequencies go against almost all life processes** (in the table below the column 'octavated' in red). The closest favourable frequency (in the column 'adjusted/optimized') shows that **only small shifts in frequencies** (see column 'newly proposed for auction') **are required to expect a healthier effect**. These small shifts in 5G-frequencies are technically easy to adjust in satellites, masts, antennas and mobile phones and the like. But this requires quite a lot of technical adjustment in antennas, both on the transmitter side and on the receiver side. This means that there will be a trade-off between costs and benefits that are not on the same denominator. So, this requires a political assessment of the ratio investment / health.

proposed freq. for auction	octavated to basic-freq.	adjusted/ optimized	newly proposed for auction	Elements Tone
700 MHz	333,8	338,7	710 MHz	F
1,4 GHz	333,8	338,7	1,421 GHz	F
2,1 GHz	250,3	254	2,131 GHz	C 4
3,5 GHz	417,2	406,5	3,410 GHz	G#
	417,2	428,7	3,597 GHz	A
26 GHz	387,4	381,1	25,577 GHz	G

In Thut's table we see with which tone (= frequency) each element resonates.

In F : resonate the elements Nitrogen, Silica and the Iron-ion Fe^{3+}
In C 4 : resonates almost with carbon dioxide CO_2
In G# : hydroxide OH^-
In A : electron, water, P_2O_5 and the moon cycle
In G : resonate with Sulphur, Zinc, Copper, Oxygen, Helium and Hydrogen
In D : Carbon C, Magnesium Mg, Platinum Pt, Gold Au, Sulphate $SO_4^=$ and Titanium Ti.

Nature is full of all kinds of frequency patterns and the artificial ones are added. Thut looks at the **health aspects of combinations of tones**. Although the 5G frequencies do not directly harmonize with D or its overtones, this frequency is sensitive as well, as D is in harmonic proportion with G and A which both resonate directly with 5G frequencies (see table above).

Everything in D vibrates with G and A. The tone D resonates with G in the harmonic ratio 3/2 (fifth D:G. You get the ratio 3/2 if you divide the next octave of D (so with 2xf 285,8 = 571,6) by the f G of 381,1). So D will resonate harmonically with G because D:G = 3/2.
According to Thut this is very relevant because it means that Oxygen (in D) resonates with Carbon (in G). Moreover, the fifth on G with D (3/2) with the next fifth (3/2) with A gives the tone in which both water H2O and the electron resonate. D:G = 1.5 (2x285,8 : 381,1) and A:D = 1.5 (429,6:285,8).

The adapted frequencies recommended by the Dutch Scientific Platform EMF thus resonate favourably with many important elements and molecules in physiological processes. This insight has not yet been put forward in any other scientific study and seems to be of great importance in the discussions about the possible effects of 5G.

6. Protein music.

Finally - a third step - a check whether or not the 5G frequencies fit with **the amino acid frequencies discovered by Sternheimer**. A discovery that is reliable and sound as in the agricultural sector the French organisation Genodics achieves convincing results with this technology. We know that proteins are made up of combinations of amino acids. Sternheimer discovered that the amino acids - during the formation of a protein - give off specific frequencies in a very specific sequence and that that sequence also determines the sequence in which the amino acids connect to each other. Each protein is formed from its typical combination of amino acids, so **each protein has its own recognisable melody**. It turns out in practice that supporting this melody with the same melody in audible music strengthens the formation of the protein in question. Sternheimer's theory has meanwhile been practically worked out and this technology has been tested many times in farming practice and has been found to increase the robustness of crops and animals. For example, grapes treated with the appropriate melody contain 5 to 15 % more sugar and taste better according to tasting panels.
Furthermore, the Genodics technology shows good results in the cultivation of crops, and in less disease in animals and plants. Its technique can also increase storage of CO2 in crops and soils. Probably an interesting link to climate policy as well. Conversely, the activity of undesired proteins can also be prevented with an adjusted melody.

Again: are these findings relevant to our thinking about 5G? Indeed, also the adjusted or optimized 5G frequencies could influence the action of amino acids. All adjusted and **recommended 5G frequencies together may influence the activity of 14 of the 20 common amino acids**:

0,710 GHz tone F : *Proline, Valine, Threonine, Cysteine*
1,421 GHz tone F : *Proline, Valine, Threonine, Cysteine*
2,131 GHz tone C4 : *Alanine*
3,410 GHz tone G# : ....
3,597 GHz tone A : *Glycine, Glutamine, Lisina, Glutamin acid, Methionine*
25,577 GHz tone G : *Leucine, Isoleucine, Asparagine, Aspartane acid*

If 14 of the 20 common amino acids would be directly influenced by 5G frequencies, then that it is an issue deserving careful research, before 5G frequencies are open for auction.

Aminozuur		Toon
Gly	=	Low A
Ala	=	C
Ser	=	E
P,V,T,C	=	F
L,I,N,D	=	G
Q,K,E,M	=	A
His	=	B flat
F	=	B
Arg,Tyr	=	Sharp C
Trp	=	Sharp D

Table of amino acids with their own specific tone (source: Genodics). The tones of 20 amino acids, expressed in 10 music tones. Glycine, Alanine, Serine, P (proline), V (valine), T (threonine), C (cysteine), L (leucine), I (isoleucine), N (asparagine), D (aspartanoic acid), Q (Glutamine), K (Lisina), E (glutamic acid), M (methionine), Histidine, F (phenylalanine), Arginine, Tyrosine and Tryptophan. In the table below the names of these amino acids are abbreviated.

7. Primary Conclusions

In any case, these three different approaches of the biological influence of frequencies conclude in common that **emitting more and higher frequencies will fundamentally affect all life processes**. We can indeed speak with Sander Funneman of an **electrical ecosystem** that works with electrical and magnetic principles and that is therefore - by definition - sensitive to other electromagnetic fields to which it is exposed. And to which the ecosystem, with each participant in it, should be able to adapt or protect itself. Especially for the 3% to 5-7% sensitive people, protection methods are highly desirable. Where this does not succeed, disruption of metabolic processes will occur, resulting in discomfort and disease.

All three approaches also indicate that frequencies can be selected from which less adverse effects can be expected. Or that can even have a positive effect on life processes. In any case, **the choice of transmission frequencies is extremely important for the health of people, animals, plants, water, insects and soils.**

8. Climate, energy consumption and energy savings.

In addition to this conclusion about human health - which can be extended to effects on animal and plant health because the physiological processes are very similar - there is another aspect that clings to the higher frequencies and that is the **higher energy consumption required** for it. This means that the rollout of 5G could accelerate global warming. Generating higher frequencies requires more energy. Planck's formula E=hxf shows that the higher f requires proportionately more E as well. Currently, the ICT sector consumes around 10% of the world's energy needs. Scaling up to 5G could increase the energy requirement to 20% of the total (according to a study of Telecom industry) or more (according to domestic biologist Koen van Biezen). In short, **scaling up to 5G is at odds with current climate policy**.

However, there is also a glimmer of light, suggested by Walter Thut. He suspects that the **frequency adjustment** as proposed here by the Science Platform EMF **could save some energy** on the side of the broadcasting installations and the receivers. The optimised frequencies are supposedly more easily incorporated into the existing vibration patterns around the globe (they resonate with it) and will therefore require less energy to generate, transmit or to detect them. Choosing **slightly adjusted frequencies therefore seems relevant for climate policy**: a suggestion worth considering before rolling out the intended 5G frequencies.

9. Energy-impact of shorter waves

On the receiving side, the higher frequencies also have more and other impacts - on human and animal tissue and on metabolic processes in humans, animals and plants. Even though the shorter waves - the higher frequencies - do not penetrate as far into living tissue (although this too has been scientifically questioned because the vibrations through the sweat glands would penetrate deeper), even reduced penetration leads to a variety of effects. Especially because **most radiation is modulated and/or pulsating**. It can be stated - on the basis of much recent research - that in addition to the thermal effects, there will also be **explicit effects on DNA, on immune systems, on water, on animals and plants and on the psyche of humans**. All such effects are being denied by ICNIRP, without sufficiently justifying this position.

10. And how healthy are the 4G frequencies?

The 4G frequencies used in the Netherlands are 800 and 900 MHz and 2.1 and 2.6 GHz. Here as well I calculated the corresponding basic frequencies in the table below. It appears that **3 of the 4 frequencies are in the life-threatening domain**.

freq. available	octaved to basic-freq.
800 MHz	382,5
900 MHz	429,2
2,1 GHz	250,3
2,6 GHz	495,9

11. Comparison with the microwave frequency.

The internationally agreed **frequency for microwaves is 2.45 GHz** (of which 467.3 is the basic frequency, a frequency in the **unhealthy** domain). At these frequencies, the water molecules in the food will rotate, causing the water to boil. **At higher frequencies, water molecules rotate a little faster and heat up more**. This will be the case for **everything that contains water, like plants and animals and people**. That's why you have to close the door of the microwave before you turn it on. But the same principle applies to the climate. If thousands of additional satellites will mirror the intended 5G frequencies, the process will also increase the temperature of the water in the clouds. And high in the clouds, there is no protective door to keep its effects inside. This **microwave effect also runs counter to the climate policy** in force.

12. Protection of life is possible.

In the meantime, various protection methods are being developed against the adverse effects of increasing EMF radiation. These methods range from special geometric figures on your mobile phone to specific minerals that can transform 80% of adverse frequencies into favourable ones. Semiconductors can also be used to modulate the waves in such a way that less damage is caused. However, only little solid research into the effectiveness of various methods has yet been done. In light of the expected increase in EHS allergy, **the need to further develop reliable protective technology on a wide scale is increasing**.
Geesink proposed to add some extra coherent frequencies to the alternating G-signal of coherence and decoherence. He has conducted research into this topic (at DSM). This frequency adjustment is possible, for example, with semiconductors that add the required coherent patterns to the intended 5G-signals without disrupting the envisaged communication functions of the 5G-signal.

13. Finally: the precautionary principle or billions of claims for damages?

It has already been shown several times in the world that a necessary adaptation of techniques is purposely delayed when major interests are at stake. It is only natural to **compare the current controversy in 5G with the gradual acceptance of research showing that tobacco is bad for human health**? This health effect had already been scientifically proven in the 1950s-1960s. However, it was not until the 1990s and 2000s that convincing policies and legislation were put in place. So, it took 40 years to get past the doubts sown by scientific institutions of - or supported by - the tobacco industry. Their reasoning was invariably: 'not all research comes to the same result', 'science is not unanimous' and 'so there is no scientifically solid foundation for rigorous anti-tobacco policies'. We know that such 'disagreement' in the world of science can be manipulated easily if scientists, directly or indirectly paid by the tobacco industry, published studies showing that tobacco hardly does any serious harm.

Interestingly, **recently the tobacco industry has been hit by very high financial claims, enforced by the judiciary**. Ten to twenty years after the last convulsions of denial of possible health damage caused by tobacco, the financial damage amounts to billions of dollars.

A similar **delaying tactic** has been observed in dealing with the damage caused by asbestos. And in accepting the harmfulness of the herbicide Round-Up. If the precautionary principle had been applied at the time, a great deal of damage would have been avoided and the industry nowadays would not have to pay billions in claims.

14. The challenge for the government: weighing costs vs. benefits

However, there is another complicating factor in the game. **The auctioning of frequencies is a lucrative business for the nation states.** It brings billions of euros into the drawer of the tax authorities. Actually, without any quid pro quo, except for issuing a licence. So, it is quite interesting and tempting to take a less critical look at the expected side-effects on health. And very tempting to formulate policy based on the reassuring reports of the telecom industry. The governments have to face the dilemma between billions in income on the short term and ensuring a healthy living environment for the population on the mid-term and the possibility of future claims for damages, although that's beyond the next elections. The Dutch court was right to say - in June 2020 - that **the state can be held responsible for any costs of damage to the health** of humans, animals and plants, in short, damage to the health of the electrical ecosystem in which we live. Is our society – represented in our parliament - willing to accept these costs for being able to play games even faster and drive cars automatically anywhere on the globe?
Let's sum up now the costs related to the various negative effects of 5G and equate it to the benefits. That equation will look like the following:

BENEFITS :
+ revenue from auction (IN for the State of the Netherlands)
+ fast automatic steering vehicles (for the benefit of car manufacturers, etc.)
+ faster gaming (citizens and trainers)
+ faster communication between police, fire brigades and hospitals (benefit of citizens)
+ profit on sales of products and services (telecom)
+ profit sales of data on user behaviour (telecom)

Vs.

COSTS :
- cost of installing additional masts and antennas and satellites (providers)
- costs of increasing EHS allergy (citizens/insurances)
- health costs due to less robust immune systems of man (insurance), animals (citizens) and plants (farmers and horticulturists and citizens and nature managers)
- costs of measures to combat additional global warming (state of NL)
- damage claims in the future (state and/or providers).

From a societal point of view, the costs might be higher than the benefits. In the long run, after some elections, not rolling out might have been financially attractive, and above all, morally more responsible from a precautionary point of view.

In this context, **it is morally, technically and financially sensible to postpone the rollout of 5G by at least one year in order to have independent research carried out into the correctness of the arguments shown here** and into the prospects for improvement or for limitation of damage. Roughly 50 million euros investments in this type of independent research is less than one percent of the total benefits and can therefore easily be added to the costs.

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17-7-2020

Annexes:

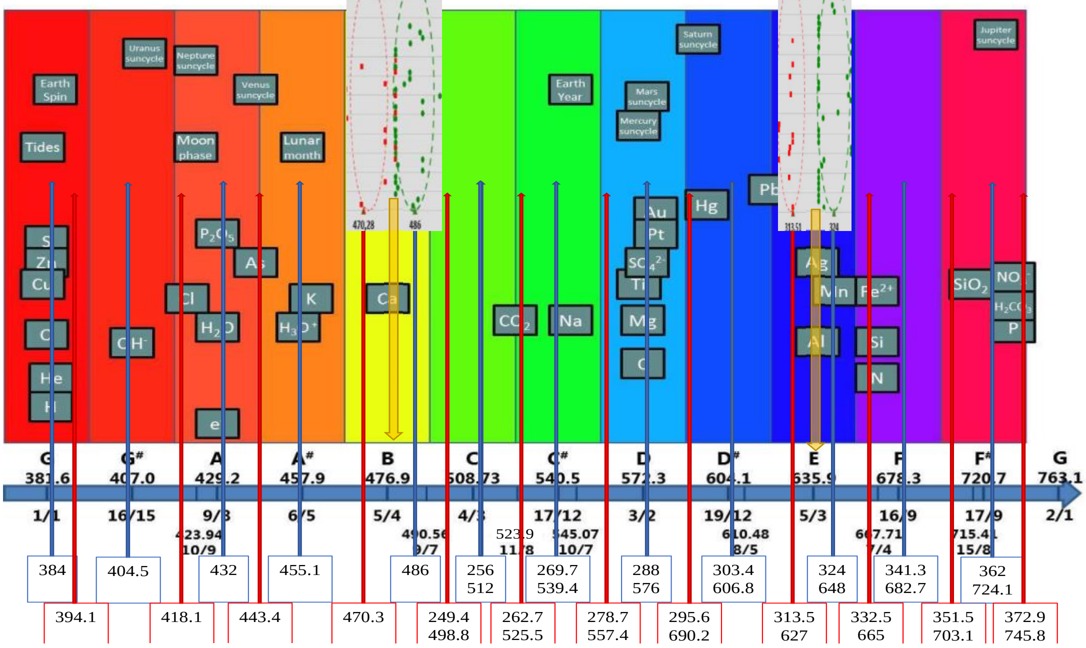
PS: Platform Research: In autumn 2020, this EMF science platform will formulate further research proposals. Among other matters, the **sensitivity of water to these frequencies** will play a prominent role. For example, the ionisation of water appears to change in the vicinity of 4G or 5G masts. And water plays an essential role in all life.

PS: 2 Walter Thut: "A **tempered scale** has been developed for instruments like the piano. It has been developed, because it is not possible to tune the piano when you switch from one to another scale, for example from C to G, or to A. When you play in any key on such an instrument, for example in C, A or G, the 12 notes (including half notes) are exactly the same frequencies. Due to this compromise *the ratio between the notes are not exactly in a harmonic ratio (of integers)*.

If we tune an instrument on the **absolute scale G**, the frequencies of these 2 scales of the notes are not identical. But *the specific frequencies within a scale are a 100% in a harmonic ratio*. **This is how nature functions, with harmonic ratios and resonance "phenomena"**. When I compared in detail various possible scales, the **scale of G fit the best**. **G is also the note with highest accumulation of important elements in organisms**.

You can see on the attached detailed graph **comparing the two approaches, that in 2 specific frequency points the measured frequencies of their work fit in better to this absolute G scale than into the tempered scale."**

Harmonics – Elements Tal … alter K. Thut, basic development until 2003 … August 2013 (f +)


Earth Spin
Tides
Uranus suncycle
Neptune suncycle
Venus suncycle
Moon phase
Lunar month
Earth Year
Saturn suncycle
Mars suncycle
Mercury suncycle
Jupiter suncycle
Hg
Pb
Au
Pt
Ag
Mn
Fe2+
SiO2
Si
N
Al
Ti
Mg
Na
CO2
Ca
K
Cl
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5/3
16/9
667.71 7/4
17/9
715.41 15/8
2/1
384
404.5
432
455.1
486
256 512
269.7 539.4
288 576
303.4 606.8
324 648
341.3 682.7
362 724.1
394.1
418.1
443.4
470.3
249.4 498.8
262.7 525.5
278.7 557.4
295.6 690.2
313.5 627
332.5 665
351.5 703.1
372.9 745.8

Comparison methods for finding the most important frequencies in nature, and for defining a musical scale describing these frequencies