

## 5G, 6G, 7G, AMS og WiFi: Den nye miljøgiften

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**I dag demonstreres det kloden rundt mot 5G. Begrunnelsene er mange. Men for meg er det først og fremst én som er viktig: ødeleggelsen av livets forutsetninger på kloden.**

**De vitenskapelige bevisene blir stadig tydeligere. Spillet for å feie dem under teppet likeså. En ny «tobakksskandale» av globale proporsjoner blir stadig tydeligere for stadig fler. For kostnadssiden er kommet til syne for alvor - «mystisk fugledød», katastrofal nedgang i insektsbestander, «diffuse helseplager» som følger med installasjon av AMS-målere. De kan alle forklares utfra de samme forskningsfunn som lenge har ligget på bordet: Livets mest fundamentale prosesser angripes med mikrobølger.**

Det er ingen ønskesituasjon for kloden at også denne vekstmotoren – IKT – i verdensøkonomien viser seg å møte veggen. For kloden rundt sitter det politikere og forskere og leter etter ny vekst. Og det sitter næringslivsfolk som har som jobb å utnytte de mulighetene de kan finne for å skape økt omsetning og høyere avkastning. Summen av dette er velferds- og forbrukersamfunnet, der vi forbrukere presser på for å få dem begge til å levere stadig mer. For tida spesielt innen IKT.

Dette er elementær miljøkunnskap: Ingen trær vokser inn i himmelen. Ingen ressurser er uuttømmelige. Ingen forbruk kan øke i det uendelige. Dersom vi bruker mer enn det naturen produserer som overskudd, blir vi før eller siden konfrontert med kostnadene. Før eller siden kommer vi til det punktet der S-kurven over nytte i forhold til kostnader speilvendes og vi ødelegger stadig mer jo mer vi høster.

Dette er også kjernen i økologifaget og i tankegangen bak alle moderne miljøbevegelser. Til nå har

denne tankegangen først og fremst vært brukt på industrisamfunnets ødeleggelser av naturen. Det har dreid seg om gruvedrift, avfall i naturen og kjemikalie-utslipp – samtidig som forbrukersamfunnets vekstøkonomi har funnet stadig nye områder å ekspandere inn i, og har effektivisert ressursbruken. Resultatet er mindre svinn, ikke mindre ressursbruk. Tvert om øker all ressursbruk, og vi forstår godt at det ikke kan fortsette slik, samtidig som ingen evner å gjøre noe med det.

Siden 1980-tallet har utviklingen av informasjonssamfunnet vært den store, nye drivkraften i økonomien og samfunnsutviklingen. Endelig så vi for oss en ressurs der naturen var nærmest uuttømmelig og ganske uten kostnader. Men nå møter vi veggen også der: Det var ikke slik. Mikrobølgene viste seg å ha skadevirkninger vi ikke var klar over.

Det vil si: vi var godt kjent med dem. For skadevirkningene var fant forskerne alt på 1970-tallet i form av DNA-skader og økt kreft, i tillegg til all verdens diffuse helseplager. Dette kommer fram i forskningsrapportene fra den kalde krigens dager – i Øst som i Vest. Og de er det mange av. Det kommer også fram i stort omfang i seinere forskning – gang på gang. Men enorme nærings- og politiske interesser vender det døve øret til og insisterer på at slik kan det ikke være. Budskapet er for vanskelig å ta inn over seg. Det rokker ved for mye. Gjennom finurlig byråkratisk arbeid lurer de oss ganske enkelt – og lurer andre byråkrater, for eksempel i vårt nasjonale strålevern, DSA, til å bygge videre på deres jukserier, og markedsføre falske forestillinger om at ressursbruken her kan vokse uten skadevirkninger. Den kommende boka til cellefysiologen Susan Pockett, som lanseres på møtet i Litteraturhuset i Oslo den 11. november, viser jukset i detaljerte eksempler. (Program og påmelding [HER](#).)

Jussen viser seg å være et svakt redskap i miljøsaker – ettersom den stiller krav om at det må påvises klare, direkte sammenhenger mellom et offer og det som volder skaden. Når årsakene er mange og samspillet komplisert, taper miljøet og miljøforurensningens ofre, mens skadevolderne går fri.

Derfor – fordi næringslivet og politikerne og industrialismens miljøbevegelser svikter i arbeidet med å bremse og reversere denne forurensningen – demonstreres det i dag kloden rundt. En av de internasjonale aksjonsgruppene som setter mikrobølgene på miljøagendaen, lister opp følgende steder, men har åpenbart ikke fått med seg alle, for bare i Norge er det langt fler:

*Los Angeles (Venice Beach)-US, Las Vegas -US, Connecticut-US, Berkeley, CA-US, Loveland, Lawrence, Kansas -US, Colorado-US, Ontario-Canada, Winnipeg-Canada, Calgary-Canada, Qualicum Beach-Canada, Madrid-Spain, Barcelona,-Spain, Granada-Spain, Almeria-Spain, Ibiza-Spain, Mallorca-Spain, Tenerife-Spain, Las Palmas-Spain, Lanzarote-Spain, Menorca-Spain, La Gomera, Canary Islands-Spain, Onati-Basque Country, Brussels-Belgium, St Malo-France, Nantes-France, Cork-Ireland, Umea-Sweden, Falun-Sweden, Malmo-Sweden, Goteborg-Sweden, Stockholm-Sweden, Bergen-Norway, Copenhagen-Denmark, Aarhus-Denmark, Aaland-Finland, Geneva-Switzerland, Oberursel-Germany, Krakow-Poland, Hungary-online, London-UK, Bristol-UK, Stroud-UK, Bath-UK, Isle of Wight-UK, Cardigan-Wales, Various Protests in Italy, Uruguay, Peru, New Caledonia-South Pacific, Mumbai-India, Melbourne-Australia.*

Lista fra den samme organisasjonen over skadevirkningene fra 5G tar jeg meg ikke tid til å oversette. Du finner den nedenfor.

Ha en god helg!

Einar Flydal, den 26. september 2020

## 5G THE ENVIRONMENTAL IMPACT

From STOP5G international.org

**Organisms** - Continuous exposure to non-ionising microwave radiation, has a detrimental impact on all living organisms, animals, birds, insects, plants, trees, soil based micro-organisms, as well as humans. Birds may abandon their nests, suffer plumage deterioration, locomotion problems, reduced survivorship or death. The declining bee population suffers colony collapse, and disrupted navigational skills. Bees are a crucial part of the earth's ecosystem and vital for agriculture, providing pollination for our plant-based food.

**Ecosystems** - Microbes central to all life on Earth, are also susceptible to damage from microwave radiation. Microbes are diverse in form and function. In soils, one teaspoon of topsoil contains around 1 billion individual microscopic cells and around 10,000 different species. These organisms have many tasks, and are central to crop fertility, purifying the environment from pollutants, regulating carbon storage stocks and production/consumption of many significant green house gases, such as methane and nitrous oxides.

**Energy Consumption** - The expansion of the use of digital technology and the 5G wireless network, is the most significant contributor to increased energy consumption. During 2013-15 the expansion of the wireless cloud was equivalent to an additional 4.9 million cars on the road. Current mobile phone usage at 3%, consumes energy at a higher rate than aviation. This is projected to rise to 20% over a decade, but with 5G, energy consumption is predicted to escalate to upwards of 170% by 2026. By 2030 information technology will consume one fifth of all global electricity.

**Carbon emissions** – The use of digital technologies increases as the global population rises and new devices enter the market. 5G will create an increased demand for such devices, therefore raising the current carbon footprint. During production, digital technologies are at their least environmentally sound, generating around 68% of total carbon emissions, equating to 30kg of carbon dioxide. The total impact that digital devices have on carbon emissions throughout their life span, from manufacture to the energy required to power them and ultimately the end waste created, is hard to estimate.

**Earth's Natural Electromagnetism** - The alteration of the Earth's electromagnetic environment may be an even greater threat to life than the radiation from ground-based antennas. 5G satellites located in the Earth's magnetosphere, will exert a significant influence over the electrical properties of the atmosphere or the global electrical circuit in which we naturally inhabit. The biological rhythms of living species are controlled by the Earth's natural electromagnetic environment. The wellbeing of all living organisms depends on the stability of this environment, and the electrical properties of the Earth's atmosphere.

**Space debris** - enveloping our planet in low Earth orbit, lies within 1.250 miles of the Earth's surface. The debris ranges from microscopic particles to obsolete spacecraft, chunks of satellites, rocket bodies, momentum flywheels, nuclear reactor cores to residual fragments from a collision or debris breaking up. Space debris moves about 10 x faster than a bullet. Some will fall out of orbit and burn in the Earth's atmosphere, but a giant rocket fragment crashing into a satellite at 21,6000 mph would present untold problems on Earth. As the launching of 5G satellites continues, without an appropriate end of life plan, this situation can only worsen.

**Atmosphere** - Implementation of a 5G global wireless network includes the launching of rockets to deploy 5G satellites. The satellites will have a short lifespan, which would indicate an increase in deployments for the foreseeable future. Black carbon particulates emitted through these launches,

could potentially cause significant changes in the global atmospheric circulation and distributions of ozone and temperatures. Solid state rocket exhaust contains metallic debris, chlorine and alumina which destroys the ozone. Google's Project Loon is launching helium balloons. The balloons will only have a 10-month lifespan. The amount of helium being used or its' impact is yet unknown.

**Oxygen and water** - Higher radio frequency signals especially in the mm-wave range, are effected by atmospheric attenuation. This attenuation in the atmosphere is caused mainly by signal absorption by gasses such as O<sub>2</sub> and H<sub>2</sub>O. The effect of signal absorption under 10 GHz is fairly low and predictable, however above this, the attenuation increases significantly, especially at certain frequencies. This is dependent on the absorbing characteristics of gasses, with 60GHz being absorbed by the atmosphere with almost 98%. attenuation by O<sub>2</sub>.

**Noise** – The global wireless use of radio-frequency threatens vital climate applications, long term weather and natural disaster predictions, along with the study of water vapour in relation to climate change. Transmissions 24/7 from mobile-phone networks degrade the quality of the Earth Observations from space. Certain 5G radiofrequency signals, are close to those used by satellites to gather crucial weather and climate data. A noise buffer, may be required between the 5G transmissions and the water-vapour signal to minimise interference. Electromagnetic noise interference disrupts the navigation process of birds, bees and other insects.

**Light pollution** – ‘Brightness’ from SpaceX Starlite satellite constellations will be visible with the naked eye, and will destroy the natural aspect of the night sky. It will also have a disastrous effect on astronomy. The ability to search for potentially hazardous asteroids and comets, the most dangerous objects in the entire Universe to our species survival, will be threatened. The specific identification and measurement of transient and variable events, such as supernovae, flares, and variable stars, may also be lost.

**Data** - harvested by 5G infrastructure is likely to result in an increase in data traffic of up to a thousand times. The data will require massive computers to allow it to be stored and maintained. These computers will be housed in large data storage centres.

**Economic incentives** - mean that telecommunication companies will pursue their strategies for increased marketing and production of technology in spite of any known environmental impact. . By way of the experimental nature of 5G, we cannot foresee the full impact that the new 5G technology is going to have on the environment.

**Waste** - The many component parts used in technology associated with 5G network creates waste and scours important resources, with detrimental consequences for the environment. Precious metals and minerals used in the production of smart-phones or the small cells needed for 5G, are not a renewable resource. These metals often cannot be recycled and so the technologies cannot be recycled, thus creating tons of waste which ends up in landfills or other disposal systems

**Devastation** – The Congo rich in minerals, is mined for columbite-tantalite or coltan for use in the manufacture of electronic devices. The mining has a devastating impact on the incredible biodiversity of the region, which is the habitat of the Grauer's Gorillas. The forests are decimated by the mines and wildlife is killed or traded. Grauer's Gorillas are one of the 25 mostendangered primates in the world. Scientists fear they may very soon be extinct.

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