

The Race Towards Extinction: Climate Change versus the 5G Microwave Technology Roll Out

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Theme: [Environment](#), [Science and Medicine](#)

By now, most of us should have come to realize that plant, animal and human life is not eternal on this planet. For several decades atmospheric scientists have been warning that the orgy of anthropogenic release of greenhouse gases, if it is permitted to continue at current rates, will bring life as we know to an end. Where scientists disagree, and where there remains growing debate, concerns the timeline before global warming's acceleration cascades into runaway conditions leading towards our demise. Nevertheless, one thing seems certain, for anyone who bothers to follow the steady flow of climate change reports and updates, every year conditions are becoming more dire than the previous years. And as scientists consistently have had to reevaluate their earlier predictions, the situation is turning more drastic.

Not to be outdone by the fossil fuel industry's addiction to burning fossil fuels, nor our blustering neoliberal capitalist rush to establish full spectrum economic dominance, the telecommunications industry and Silicon Valley are eager to enter the horse race to imperil human existence. In the past we have regularly reported on the corruption that is endemic in our federal health agencies and the pharmaceutical industry, in the nuclear power industry and industrial agriculture. Now we address the culture of deception that permeates the telecommunications and wireless regime, and its irresponsible denialism about electromagnetic frequency radiation's effects on plant and animal life.

The roll out of 5G (Fifth Generation) technology across the nation is being framed as a sprint contest against China, which is also determined to transition to 5G.

Europe, in defiance of American pressures, is now leaning towards the Chinese company Huawei to service the European continent. It is [expected that by 2024](#), about 40 percent of the world's population will be connected to the 5G network. That means tens of billions of devices, from cars to refrigerators, traffic lights, surveillance equipment, utility smart meters and phones will be interlinked to a global web of EMF technologies. Nothing with an electronic chip will be exempt. No plant or tree, insect, bird, fish, animal or human will be able to escape 24-hour a day exposure to enormous amounts of electromagnetic pollution. Already this new generation technology is being aggressively promoted and marketed to the public without any mention of its catastrophic risks. The organization Physicians for Safe Technology is now warning that its predictable adverse effect will create "biological, environmental as well as societal disruption" and will "be difficult or impossible to reverse."

Whereas the current 4G technology succeeded in a complete digital migration enabling higher speeds for mobile phones, video and internet interfaces, [in the words](#) of President Obama's FCC chair Tom Wheeler, 5G will be the "Internet of Everything."

"If something can be connected," Wheeler told a National Press Club audience in 2016, "it will be connected in the 5G world. But with predictions of hundreds of billions of microchip-enabled products from pill bottles to plant waterers, you can be sure of only one thing: the biggest IOT [Internet of Things] has yet to be imagined."

Wheeler believes he is in charge of this revolution:

"the 5G revolution will touch all corners and that is damn important."

The Obama administration's FCC launched the Spectrum Frontiers rules to mandate 5G rollout as a "national priority." In the rules, we find a disturbing initiative; that is, technology will drive policy rather than vice versa. [Wheeler stated](#) this in no uncertain terms. In other words, the private telecommunications industrial complex is being given precedence over elected legislators, including Congressional leaders who voice deep concerns about 5G's threats. It also has precedence over the warnings voiced by the medical, health and environmental agencies.

However, the 5G race actually goes back to the Clinton White House. In 1996, Clinton foolishly handed over to the telecommunications industry carte blanche power over state and local governments to install 5G technologies. The Telecommunications Act (TCA) is a dismal piece of legislation. It is another incident where Clinton was a far more loyal enabler to private corporate interests instead of the public. Clinton's TCA decrees that no health or environmental concern can interfere with telecom installations. It gives full power to the FCC to regulate telecom EMF's health effects, yet the FCC is not a health agency nor are there any biomedical experts in the FCC. In addition, the Act takes away the authority of town, city, and county councils to rule against 5G stations and cell tower installments. And if towns vote to prevent a 5G tower being erected near a school or children's park, or a crowded neighborhood, the companies have the right to sue.

[For example](#), in the prosperous town of Moraga in the San Francisco Bay Area, town council efforts are underway to prevent the installation of a 5G cell tower. The initiative is being launched by a woman whose husband, a heavy cell phone user since the mid-1980s, developed a brain tumor near the ear where he held the phone for many years. Moraga is mobilized to bring a halt to the tower. But it is losing battle. And there are similar cases occurring throughout the country as the public becomes increasingly warned about 5G health risks.

No argument can be raised against the benefits that wireless technologies have brought to the world. They have contributed to remarkable advances in medical diagnostic tools, security equipment, better telecommunication networks for governments, businesses and organizations, entertainment, faster connections on the worldwide web, connected the internet with mobile phones, and much more. Consequently it has also been a boon for job growth. But their disadvantages and defects have largely been hidden from public view. And the telecommunication industry and government officials have been completely aware of these risks for over half a century. Other risks are being identified and described as independent research and analysis outside the purview of corporate telecom oversight continues.

Unfortunately the government is not investing in the necessary safety studies to determine

whether rolling out 5G is a wise policy. Wheeler, the initial architect for the nation's 5G strategy, has never acknowledged that there are known health risks associated with electromagnetic frequencies (EMF) . He is a product of the same private industrial mindset that has churned out climate change deniers in the big oil companies and pesticide- and GMO-risk deniers in the Big Agriculture.

Americans need to wake up to the fact that they are facing a formidable enemy in the telecommunication industry. The FCC and the cartel of telecom companies and Silicon Valley remain in complete denial about the multitude of health risks that 5G antennas, mobile phones, smart meters and other electronic appliances that will be connected with 5G, have been shown to contribute towards. Wheeler, who was appointed by Obama, took the reins of the FCC with an intention to push 5G technology regardless of any opposition. He also originally opposed net neutrality that would financially benefit internet providers' coffers at the public's expense. The subsequent backlash from Silicon companies such as Google, Microsoft, eBay, etc., forced the FCC to back pedal. There was never any question about Wheeler's loyalty to his masters in the cable and wireless industry. [Before entering politics](#), he was a venture capitalist and lobbyist for the telecommunications industry, a former president of the National Cable and Telecommunications Association, a CEO of the Cellular Telecommunications and Internet Association, and the only person to twice be inducted into the Wireless Hall of Fame. What Wheeler accomplished in office on behalf of the telecommunications industry is analogous to the successes of Wall Street bankers within during the Clinton presidency to dismantle consumer protections from casino investments. Since leaving the FCC, Wheeler has become a Fellow at the corporate-centrist Brookings Institute where he continues to advance telecommunication's commercial interests

Unfortunately the situation has worsened under Trump. The current FCC Consumer Advisory Panel is controlled by the Koch Brothers' American Legislative Exchange Council (ALEC) — staunch opponents of net neutrality, municipal broadband and consumer protections. The [agency intends](#) to grant the telecommunications industry with subsidized access to all local and state public properties. This will make the telecommunication industry's dominance over state, city and state council rights complete.

Much of the technology that will be utilized by 5G is not completely new. The US and Soviet militaries have been experimenting with high electromagnetic frequency and microwave weaponry since the 1960s. A 1985 [declassified CIA report](#) on "Soviet Directed Energy Weapons" reveals that the Russians had been conducting extensive research in microwave particle beams and electromagnetic frequency directed laser weapons since the early 1960s. Their research was thorough and conceivable more advanced than the US military efforts.

Preface

Since the President's announcement on March 23, 1983, which marked the birth of the US Strategic Defense Initiative (SDI), a controversy has arisen over it which is concerned not only with the technical feasibility and costs of strategic defense against ballistic missiles but also its impact on the strategic balance between the US and the Soviet Union, on US allies, and on arms control negotiations.

In the past few months, however, lines of argument have begun to be made which involve counterpart Soviet defensive systems. And though we believe that in the planning and development of defensive weapons attention should be directed primarily at the threat posed by the enemy's offensive systems, i.e., the numbers, characteristics, performance and vulnerabilities of Soviet ICBMs and SLBMs, it is becoming necessary to provide basic information on Soviet defensive, or counterpart-SDI, research and developments. Opponents and proponents alike of the SDI should have a basic understanding and an appreciation of the nature and magnitude of Soviet efforts in strategic ballistic missile defense.

This paper is intended to meet a part of that requirement. It addresses Soviet research and development in directed-energy weapons: high-power/high-energy lasers, particle beams, and the microwave or radio-frequency beams.

[Screenshot from the CIA](#)

The only practical and conceivable benefit 5G has for the average consumer is speed. It is anticipated to be at least 10 to 100 times faster than the current 4G technology, which in turn was 10 times faster than 3G. Therefore, for those impatient with download times, it is largely only time-saving perk with greater interface capabilities with other wireless devices. However, it will be far greater boon to the Defense Department's development of weapons and crowd control technologies. With 5G circumnavigating the globe, we cannot begin to imagine the horrid possibilities of future weapons, which could even include directed measures to trigger illnesses and disease in a foreign populations. With the 5G rollout we will be finally be on the path of entering an Orwellian nightmare.

A plethora of medical and environmental research has accumulated about the health and ecological risks of electromagnetic frequency radiation (EMF) and microwaves. To avoid confusion, 5G transmission is within the microwave band frequency. [It is estimated](#) that there are over 10,000 peer-reviewed clinical studies mentioning serious molecular biological injury and defects to organs, neurons, cells and cellular function, and DNA damage to plants, animals and humans alike. Between August 2016 and September 2018, over [400 new studies](#) on electromagnetic radiation risks have been compiled by public health Professor Joel Moskowitz at the University of California at Berkeley. These studies cover earlier generation technologies, whereas 5G will be far more evasive and less safe. Compared to 4G technology in use today, [every 5G base station](#) will contain hundreds of thousands of antennas each aiming laser like microwave beams to all devices. In an urban area, base stations would be installed 100 meters (328 feet) apart.

For example, [a study published](#) in the August 2018 issue of *Journal of Medical Imaging and Health Informatics* concluded after an extensive review of the medical literature that “incidence of cancer cases was remarkably higher among people who resided in 400 meters from mobile antennas, in comparison to those who lived further away. Females reported statistically more health complaints than males. Inhabitants living close to cellular antennas are also at increased risk for developing neuropsychiatric complaints.” Under the 5G regime every American in a suburb or city will be living 100 meters or less from an antenna. Our lives will exist in a stew of what some now call “electrosmog.”

The Competence Initiative for the Protection of Humanity, the Environment and Democracy in Germany has [published one](#) of the most thorough series of reports on the health, biological and environmental implications of long-term exposure to electromagnetic frequencies emitted from wireless communication technologies. The Initiative is a multi-disciplinary coalition of independent medical doctors, biologists, psychologists, environmental scientists, attorneys and representatives from other disciplines. Although the research primarily covers 3G and less, the science is daunting and should sound alarms of 5G’s far more destructive health risks. Even with 3G, the evidence is conclusive that the rise in brain tumors and cancer is attributable to the overuse of mobile phones. One summary report concludes that the genotoxic effects of phone radiation “can trigger irreversible damage in genomes and reversible ones in epigenomes.” Damage to cells’ mitochondria is particularly disturbing since mitochondrial DNA is directly passed down from mothers to their offspring. [Back in 2011](#), the World Health Organization classified EMF radiation as a likely human carcinogen based upon wireless phones’ increased risk for developing malignant brain glioma tumors. The announcement was based upon scientists from 14 countries reviewing hundreds of scientific studies. Since then, the [largest study](#) of its kind through the National Toxicology Program, at a cost of \$25 million, concluded without reservation that EMF exposure below the International Commission on Non-Ionizing Radiation Protection guidelines — which most countries follow — increases the incidence of brain and heart cancers in animals, including humans.

In 2016, the Europa EM-EMF [guideline found](#) “strong evidence that long-term exposure to certain EMFs is a risk factor for diseases such as certain cancers, Alzheimer’s disease, and male infertility...Common EHS (electromagnetic hypersensitivity) symptoms include headaches, concentration difficulties, sleep problems, depression, lack of energy, fatigue, and flu-like symptoms.”

All developed countries, which have the highest levels of EMF exposure and wireless device usage, are witnessing a rapid decline in male fertility. However, [this trend](#) is being observed

globally. Since 1973 when close record keeping started to 2011, well into the wireless world, sperm concentrations have decreased 53 percent. The researchers at Hebrew University in Jerusalem who [conducted the study](#) predicts that large majority of men in the Europe could be completely infertile by 2060. [According to](#) the Department of Health and Human Services (HHS), 85 percent of couples are unable to achieve pregnancy after 12 months of trying. Male sterility is the primary problem among 30-50 percent of couples. Curiously, the HHS makes no mention of EMF exposure among its lists of probable causes, although it notes medical radiation treatments.

Yet barely do we hear about the increasing amount EMF exposure and mobile phone usages association with these rising male infertility trends. [Researchers](#) at the National Academy of Medical Sciences in Ukraine, placed study participants' sperm samples in incubation conditions either with or without Wifi mobile phone exposure. Sperm exposed to EMF showed substantial DNA fragmentation and loss of motility. More comprehensive in vitro and in vivo studies out of Hanyang University in Seoul concluded that EMF exposure dramatically altered reproductive endocrine hormones, gonadal function, embryonic development, pregnancy and fetal development. In addition, pineal gland measurements observed a decrease in melatonin, which would contribute to either sleeplessness or poor quality of sleep that is commonly noted by persons with EMF sensitivities. Sperm germ cell morphology declined and apoptosis of male germ cells were observed. [In addition](#), EMF adversely affected women's ovaries with decreases in the estrus cycle and follicle growth.

The telecommunications industry and FCC deny these types of findings because living in a sea of 5G microwave exposure these health risks will multiply exponentially in time.

In the Competence Initiative's report *Bees, Birds, and Humans: Electrosmog's Destructive Effects on Nature*, German biologist Dr. Ulrich Warnke [states](#):

"The information-processing and function systems of today's humans, plants and animals are bombarded with artificial magnetic, electric and electromagnetic fields from numerous mobile and telecommunications sources in a concentration and intensity as never before. The consequences of these developments put forth by their critics cannot be overlooked any longer. Bees and other insects are disappearing. Birds avoid certain regions and are disoriented in others. Humans suffer functional problems and other sicknesses. And the evidence that suggests some of these problems may be inheritable means we're passing them on to the next generation."

As we noted above, Russia, before and during the years after the Soviet era, aggressively conducted experiments to determine microwave technologies activities on human health and the environment. Between 1960 and 1997, [Russian scientists published](#) 878 known studies measuring microwave effects on human and animal health and the environment. The studies are largely unknown in the US nor are they encouraging. In fact, they are outright frightening because these health threats have been known for a very long time and are being completely brushed aside. If 4G technology had been categorized and regulated as a pharmaceutical drug, it would have been black boxed and removed from the market long ago. And 5G will be far more toxic.

The Soviet studies on EMF exposure's adverse effects on health and their symptoms' prevalence of frequency, many which appear to have been replicated, monitored research subjects for 5 to 10 years. In other words, the researchers were interested in measuring the

long-term effects from EMF exposure. They also involved thousands of subjects. [Among the medical disorders](#) identified were:

- Neuroasthenia and sensory somatic disorders — 91% frequency after 10 years
- CNS and autonomic nervous disorders — 59% frequency after 5 years
- Cardiovascular disease — 66% frequency after 5 years
- Circadian rhythm interruption and body temperature disruption – 85% frequency after 10 years
- Hypoglycemia – 59% frequency after 10 years
- Sensorimotor disorders and chronic fatigue – 59% frequency after 10 years
- Depression – 66% frequency after 5 years
- Resting tremors, tinnitus, hair loss – 59% frequency after 5 years
- Memory loss and chronic headaches – 50% frequency after 5 years

Other disorders identified included loss of muscle strength, thyroid hyperactivity, deterioration of eye sight, psycho-neurovegetative dystonia, asthenia, cardiac pain, etc. The Soviets [also found](#) that EMF's adverse effects accumulated with longer exposure; younger children had much higher sensitivity to EMF fields than adults; and, the decline in a person's health increasingly amplified EMF's adverse effects. Most important, these studies were conducted back in the 1960s. When Professor C. Susskind from the University of California at Berkeley introduced the Soviet's research during a 1968 US Senate hearing to evaluate microwaves' biological effects, [his suggestions](#) that the US should make an effort to replicate the Soviet's research and determine microwave safety, were ignored and dismissed.

We have only touched upon 5G's potential threats to human life. However, it will also have devastating consequences on wildlife, plants and the environment. A large body of scientific literature already exists to corroborate 5G's catastrophic environmental threats. For those concerned with climate change, the 5G rollout will also contribute to a warming Earth. The rollout does not portend to be green or clean. Nobody is speaking about the 20,000 plus satellites that will orbit around the planet and need to be launched by 20,000-plus rockets to advance the 5G vision. These rockets will be fueled by a new type of hydrocarbon engine. A paper released by the Aerospace Corporation predicts that this will "create a persistent layer of black carbon particles in the northern stratosphere." (Greenhouse gases normally remain in the troposphere above the earth's surface). This would likely deplete the ozone by 1 percent and the polar ozone layer by as much as 6%. The [report concludes](#) that "[A]fter one decade of continuous launches, globally averaged radiative forcing from the black carbon would exceed the forcing from the emitted CO2 by a factor of about 10 to the fifth power." In other words, 5G will have a substantial carbon footprint at a time when we must drastically cut our greenhouse gas emissions to curtail the speed of reaching critical tipping points.

The federal government and telecommunication industry are making every effort to hide the predictable inimical consequences to life on earth once 5G is fully installed and operating. During Wheeler's optimistic pep talk at the National Press Club, no mention was made about 5G detractors or ever increasing health warnings being articulated by the scientific community. Nor will the mainstream media lend its airwaves to address these deeply disturbing issues. The media is completely compromised by the telecom industry. Its conflicts of interests are rampant.

In our opinion, the 5G rollout is a naive experiment with potential holocaust-like dimensions

in the long-term. The United States, unlike Europe, has never felt obliged to follow UNESCO's Precautionary Principle to avoid "morally unacceptable harm" when the science is plausible but still uncertain. In the case of 5G, the harm to human life is certain, and [in the view](#) of Dr. Lennart Hardel, an oncology professor at University Hospital in Orebro, Sweden, it may be in violation of the Nuremberg Code.

The preponderance of quality peer-reviewed scientific data has established a direct link between EMF radiation emitted from mobile phones, computers and lap tops, and 3G to 5G antennas and towers with a multitude of illnesses. Unfortunately, based upon the lack of critical thinking and in-depth reporting evident in the mainstream media, we are reasonably confident that this expose and the excellent articles by many others will make very little impact. Mainstream media's track record for denying scientific warnings about other human-made threats to health and life confirms our confidence. Almost nothing is being done in the US, and many other nations, to lessen global warming trends. The professional corporate class will do nothing, even if they understand climate change's threats. There is simply too much profit to be made by not disrupting the status quo of conducting business-as-usual. Now, there is the national priority to push the throttle to its limit to develop worldwide wireless connectivity. Silicon Valley and its thousands of bright young minds will not wake up tomorrow and suddenly have a conscience committed to a universal set of morals and ethics. Like the generations before them, they are simply chasing the profits. Federal legislators have always followed the money. Federal regulatory agencies such as the FCC, USDA, EPA, FDA and CDC are fully captured by Wall Street and multinational corporations. State legislators are following ALEC and its funders, who create and provide bills and policies favoring special corporate interests. These laws almost never benefit the citizens of the states.

We could have learned a lesson about why 5G will not be halted for proper review by looking at past history: our failed wars and the catastrophic consequences of our regime changes such as in Libya and Honduras. Even the arrest of Julian Assange. By now, we should have learned the lessons of how Washington has handled other scientifically proven dangers to the public: genetically modified crops and chemicals like Roundup, mandatory vaccination, the dietary and environmental factors associated with our epidemics in obesity, diabetes, autism, heart diseases, etc, and the evisceration of consumer protection laws such as the Clean Water and Clean Air acts. Rarely do we ever read an honest, truthful expose in any major media source about the institutions and organizations that hold power over our lives, such as the Business Round Table, the Council on Foreign Relations and the Davos dilettantes. Nor is there ever concise reporting about the intelligence specter of the Deep State.

If we truly cared about 5G's global peril to all of planetary life and humans, by extension we would have cared about all of these other threats foreshadowing our lives. They are all interconnected. So, are we hopeless? No, because there will always be a tiny segment of the American population who "get it" and in turn becomes an agitating voice against those in power. Unfortunately, those who "get it" are excluded from every critical forum where their voices most urgently need to be heard, especially within the mainstream media that protects the power elite and oligarchs. Hence, Americans find themselves in an economic, medical, political and pseudo-scientific echo chamber. We hope this article provides a small source of light for those who wish to understand the future arrival of the 5G matrix.

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