

Date: February 23, 2019

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Re: Docket No. DOT-OST-2018-0210 - Scrap mandate for V2V communication. It poses a public health and environmental hazard and violates the ADA.

Dear Sir or Madam,

I am writing to urge you not to move forward with requiring installation of transmitters for vehicle to vehicle communication because it poses a serious public health and environmental hazard. The National Toxicology Program released results in November 2018 showing that radiofrequency radiation utilized by wireless technology, including V2V communications, can cause cancer at levels below FCC limits. Additional results show that radiofrequency radiation damages DNA. Mandating V2V communication essentially mandates consumer exposure to a carcinogenic and genotoxic pollutant. Furthermore, thousands of studies document that radiation from wireless technology can have significant biological effects at levels far below the FCC limits. Increasing evidence is showing that radiation from wireless technology is very damaging to trees and wildlife and, thus, pose an environmental hazard. V2V communication would result in markedly increased ambient levels of radiofrequency radiation along all roadways. The DOT should scrap the mandate and instead open an Notice of Proposed Rule Making (NPRM) with the aim of reducing the levels of radiofrequency exposure within vehicles for health and traffic safety reasons.

The DOT must halt implementation of the V2V mandate while a National Environmental Policy Act (NEPA) review of the environmental and human health impacts and an Environmental Impact Statement (EIS) are completed.

There is consensus within the scientific community that the existing FCC limits for wireless radiation do not protect the population from biological effects (www.EMFscientist.org). At least three federal agencies have indicated that the FCC radiofrequency radiation limits with which wireless technology must comply are not protective of either human health or the environment during the chronic non-thermal exposures ubiquitously present today: the U.S. National Toxicology Program (NTP), which released findings that **wireless radiation causes cancer and breaks DNA** (<https://ehtrust.org/clear-evidence-of-cancer-from-cell-phone-radiation-u-s-national-toxicology-program-releases-final-report-on-animal-study/>); The Department of Interior (DOI), which stated "**the electromagnetic radiation standards used by the Federal Communications Commission (FCC) continue to be based on thermal heating, a criterion now nearly 30 years out of date and inapplicable today**" (http://www.ntia.doc.gov/files/ntia/us_doi_comments.pdf); and The Environmental Protection Agency (EPA), which stated "**The FCC's current exposure guidelines ... are thermally based, and do not apply to chronic, nonthermal exposure situations.**" (http://www.emrpolicy.org/litigation/case_law/docs/noi_epa_response.pdf).

Therefore, the DOT must halt implementation of the mandate to require V2V communication in vehicles until population-based biologically-protective radiofrequency (RF) radiation limits have been put in place.

DOT must complete a NEPA review and EIS prior to mandating V2V communication

The potential environmental and human health hazards from V2V necessitates a comprehensive NEPA review [*Envtl. Def. Fund v. Tenn. Valley Auth.*, 468 F.2d 1164, 1174 (6th Cir. 1972)] and, specifically, a formal Environmental Impact Statement (EIS). The EIS should include a full review of environmental effects, as well as human health and safety.

This proposal also triggers the need for a Memoranda of Understanding (MOU) with U.S. Fish and Wildlife Service under Executive Order 13186 concerning effects on migratory birds.

U.S. Department of Interior States: Current Radiation Standards Inapplicable

On February 7, 2014, the U.S. Department of Interior (DOI) stated, “*the electromagnetic radiation standards used by the Federal Communications Commission (FCC) continue to be based on thermal heating, a criterion now nearly 30 years out of date and inapplicable today,*” in reference to the current limits governing radiation utilized by V2V communication. The DOI letter discusses a number of studies in which birds appear harmed by low-level RF radiation associated with cell towers and other wireless technologies (http://www.ntia.doc.gov/files/ntia/us_doi_comments.pdf). **Furthermore, DOI required FirstNet to undergo a comprehensive NEPA review and planning program. Implementation of V2V communication, which will have similar widespread impacts, requires a NEPA review as well.**

The National Toxicology Program recently released results showing that radiofrequency radiation can indeed both break DNA and cause cancer. A replicated European study has found that RF radiation is also a cancer promoter (<http://ehtrust.org/science/facts-national-toxicology-program-cellphone-rat-cancer-study/>). Furthermore, the literature on RF radiation in the very high frequency bands required for some V2V document DNA breakages, serious cellular resonance effects, and other detrimental metabolic effects (http://www.biointiative.org/report/wp-content/uploads/pdfs/sec15_2012_Evidence_Disruption_Modulation.pdf and http://www.stopglobalwifi/documents/2001_kositsky_et_al._-_ussr_review.pdf).

The EPA has made it clear that the FCC RF limits are not protective of anyone during the chronic non-thermal exposures such as those that V2V communication would force on us: “The FCC's current exposure guidelines, as well as those of the Institute of Electrical and Electronics Engineers (IEEE) and the International Commission on Non-ionizing Radiation Protection, **are thermally based, and do not apply to chronic, nonthermal exposure situations.** They are believed to protect against injury that may be caused by acute exposures that result in tissue heating or electric shock and burn. The hazard level (for frequencies generally at or greater than 3 MHz) is based on a specific absorption dose-rate, SAR, associated with an effect that results from an increase in body temperature. The FCC's exposure guideline **is considered protective of effects arising from a thermal mechanism but not from all possible mechanisms.** Therefore, the generalization by many that the guidelines protect human beings from harm by any or all mechanisms is not justified.” (emphasis added) (http://www.emrpolicy.org/litigation/case_law/docs/noi_epa_response.pdf)

Non-industry funded studies have consistently found links between RF radiation and various negative biological effects (www.bioinitiative.org). They include serious neurological, cardiac, and metabolic effects, as well as DNA breakage which can lead to cancer and genetic defects (<http://www.mainecoalitiontostopsmartmeters.org/?p=1469>).

My family has already experienced harm from the rapidly rising ambient levels of RF radiation. The rising ambient RF radiation levels, due to the recent wireless insanity, are already causing my family to experience symptoms of Radiofrequency Sickness. My sons get cardiac arrhythmias. My wife is functionally impaired by RF radiation in multiple ways. I experience high blood sugar and increased insulin resistance when I am exposed to RF radiation, in addition to other symptoms.

Transmitted RF radiation from any source negatively affects my health and that of my family. I am a type I, insulin-dependent diabetic. As such, I test my blood sugar many times per day. I have noticed that RF causes my blood sugar to increase in dangerous ways. On a week-long vacation to visit family, a wireless router caused my blood sugar to become very high. No matter how much insulin I used, I could not get my blood sugar to return to normal, acceptable levels. We ended up cutting our vacation short in order to bring my blood sugar back to normal. Later, we figured out what had happened. The owner of the router (a Microsoft Broadband Networking Wireless Base Station MN-700) was kind enough to turn it off during our next visit and my blood sugar was fine, until the morning we were leaving when it went up. When I checked, the router had been turned on.

One afternoon, a neighbor rode with me in my combine while I was harvesting corn. He had his cellular telephone turned on in his pocket. Shortly after he joined me, my blood sugar began to increase. I took some insulin to try to bring it back down, but to no avail. So I tried again. And again. Still without success. Later that afternoon, my neighbor left, taking his cellular telephone with him. My blood sugar immediately dropped to dangerously low levels once I was no longer exposed to the RF from the cellular telephone. Again, I didn't figure out what had happened until I had time to think later. This was one of the first times I was exposed to a cellular telephone in close proximity for several hours in a row. Now, in similar situations I ask that the phone be turned off.

My experiences with the router and cellular telephone show how RF affects me. In both situations, I was able to address the issue by asking that the devices be turned off. However, I do not have that option when the transmitters are mandated in cars. Nor do others. Insulin resistance has become a major national health problem. My experience suggests that the increasing levels of radiation from wireless technology may be an important factor.

The rapidly increasing RF radiation levels are impacting our ability to earn a living. I used to vend at farmers markets in Madison, Wisconsin and I am no longer able to do so due to the rising ambient RF radiation levels causing serious neurological symptoms suggestive of incipient ALS. The symptoms disappeared at the end of market season when I was able to spend time at my shielded home in much lower ambient RF radiation levels. (The levels outside our home are hundreds to thousands of times lower than ambient Madison levels. Even so, I can tell the improvement in my health when I am inside my shielded home where the levels are a third to a tenth the ambient outside levels and peaks are reduced by over half.) ALS is a progressive fatal neurological disorder whose incidence is increasing ([https://wwwn.cdc.gov/als/Download/Neuro1%20Clin ALS Risk Factors 2015.pdf](https://wwwn.cdc.gov/als/Download/Neuro1%20Clin%20ALS%20Risk%20Factors%202015.pdf)). ALS is being

linked to factors including oxidative damage (positively linked to smoking which causes oxidative damage), EMF exposure, and military service which would entail high levels of RF radiation exposure. RF radiation has been shown to cause oxidative damage (<http://www.ncbi.nlm.nih.gov/pubmed/26151230>). If my experience is any indicator, the DOT would be directly responsible for deaths by promoting a dangerous technology in complete disregard of the science and the scientists who are calling for biologically-based population-protective RF radiation safety limits. This willful disregard of the consequences is a violation of our human rights and the Nuremberg Code of Ethics, please read "Wireless Technology Violates Human Rights," attached and at <http://www.electricalpollution.com/documents/WirelessViolatesHumanRights2016.pdf>.

Other sources of RF also cause my blood sugar to increase. Dimmer switches, compact fluorescent lights, and variable speed motors all generate RF. Recently, the rise of wireless technology has greatly increased the incidence of RF. WiFi and cellphones make it difficult for me to conduct business or to travel. Installation of wireless vehicle to vehicle communication systems would make even short distance travel more difficult and violate my rights under the Americans with Disabilities Act. Additionally, the evidence of the potential for serious effects on human health and the environment means that an Environmental Impact Statement is required prior to allowing, but especially before mandating, transmitters in vehicles.

For safety reasons, the DOT should be opening a docket aimed at reducing the levels of wireless radiation found in vehicles instead of mandating V2V communication. DOT and National Highway Traffic Safety Administration (NHTSA) should require good engineering practices that minimize RF levels on car wiring from which it both radiates and capacitively couples to vehicle occupants, including the driver. Radiofrequency radiation is well documented to impair cognition and increase health risks, including cancer, please see www.bioinitiative.org. Please open a supplemental NPRM in order to establish new DOT and NHTSA rules to require good engineering to minimize RF exposures from transmitters (such as a shielded compartment for phones and tablets) and shielding and filtering of electrical sources such as spark plugs and alternators. See www.electricalpollution.com/RFinCars.html for more information.

Take the time to do due diligence and protect everyone's safety by conducting a comprehensive NEPA review and EIS. Protect your family, friends, and the country - implement an RF in vehicles minimization campaign. Halt V2V communication. Be on the right side of history.

Sincerely,

Dan Kleiber