



Global Union Against Radiation Deployment from Space (GUARDS)

Date: May 17, 2015

Contact: Ed Friedman, Maine USA, 207-666-3372

Global WiFi Conference in London

Are 11,000 more satellites set to severely affect public health and the ozone layer?

On 20th and 21st May, the Wireless Broadband Alliance will hold a Global Conference on WiFi development in London (<http://www.wballiance.com/wi-fi-global-congress-london-2015/>).

GUARDS is acting to raise awareness that eight companies are gearing up to provide global WiFi coverage from space within the next three to four years, starting in June this year.

This is likely to be an ecological and public health disaster.

The satellite network will endanger the ozone layer, and significantly contribute to climate change. Rocket exhaust produces ozone-destroying chlorine, aluminum oxide particles, heat, and water vapor into the stratosphere. Complete ozone destruction is observed from the exhaust of rockets – and as satellites are launched on rockets, pollution can cause potentially major changes in weather.

“About 300 launches of the space shuttle each year would be a catastrophe and the ozone layer would be completely destroyed,” Alekandr Dunayev of the Russian Space Agency, has said. (New York Times, 14 May 1991, p. 4).

The number of launches is poised to increase astronomically. Maintaining a fleet of (ultimately) 2,400 to 4,000 satellites, including drones, each with an expected lifespan of five years, will involve enough yearly rocket launches to be an environmental catastrophe. Satellites would produce further pollution when they burn up on re-entry into the atmosphere at the end of their lifespan.

No risk/benefit analysis has been done, on or made public on this plan, as far as GUARDS understands. Additionally, multiple national governments and medical associations now endorse the Precautionary Principle with regard to wireless technology, and advise preferential use of wired connections. The International Agency for Research on Cancer (IARC), a committee of

the World Health Organization, has classified RF radiation, including that emitted by WiFi, as a class 2B (possible) carcinogen. Experts are calling for a re-classification to a class 2A (probable) human carcinogen.

WiFi's radiation emissions also endanger public health and global ecology. WiFi operates using microwave radiation – at the same frequency used by microwave ovens. Future WiFi transmissions are planned to use much higher frequencies. Thousands of published studies have shown, and continue to show, damage to human DNA.

“The human body”, says Dr Gerard J. Hyland, of the University of Warwick, UK, “is an electrochemical instrument of exquisite sensitivity”, noting that, like a radio, it can be interfered with by incoming radiation. “If a signal can operate a mechanical device, it can disturb every cell in the human body”.

On May 11th 2015, 190 scientists submitted an appeal to the UN seeking further regulatory protection from RF radiation and other EMFs (<http://www.EMFscientist.org>). This supports the position of Guards that that WiFi from space poses a global hazard.

GUARDS is an international coalition of diverse groups that have joined together in order to stop the implementation of global WiFi from space, which threatens all life on earth

Notes

Environment

- Studies show radiation from wireless technology harms the environment—both flora and fauna are affected (http://www.moef.nic.in/downloads/public-information/final_mobile_towers_report.pdf and (http://www.biolmedonline.com/Articles/Vol4_4_2012/Vol4_4_202-216_BM-8.pdf).
- Exhaust from rockets has been documented to cause ozone depletion and temperature change in the upper atmosphere, both of which could have catastrophic effects on the planet's livability and climate (<http://www.eucass-proceedings.eu/articles/eucass/pdf/2013/01/eucass4p657.pdf>).

Human Health

- The International Agency for Research on Cancer (IARC), a committee of the World Health Organization, has classified RF radiation, including that emitted by wireless technology, as a class 2B carcinogen. http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf
- New Expert Study Confirms NY Times Questions on Wearable Tech: New studies demonstrate that microwave radiation from cellphones and other devices constitutes a (Group 2A) probable human carcinogen. <http://www.sys-con.com/node/3314878>
- The 1500-page BioInitiative Report on RF/MW health effects was published in 2012. The authors are 29 scientists from ten countries. They reviewed thousands of studies showing interference with chemical processes in the body, implicating RF/MW in a whole spectrum of alarming effects including genetic damage, cancer, immune dysfunction, neurological injury, and infertility. The report can be found at www.bioinitiative.org.
- The *Letter of Notice* sent in February 2015 to the European Economic and Social Committee by 88 organizations regarding the betrayal of public trust in ignoring the effects of RF/MW radiation can be found at http://www.radiationresearch.org/images/rrt_articles/EM-Radiation-Research-Trust-Letter-of-Notice-Served-on-Mr-Richard-Adams.pdf.
- British physician Erica Mallery-Blythe has an excellent report focusing on Electromagnetic Hypersensitivity (EHS), now estimated to affect five percent of the world's population. www.iemfa.org/wp-content/pdf/Mallery-Blythe-v1-EESC.pdf

Satellite Deployment Plans

The eight companies seeking to provide global WiFi radiation include:

SpaceX: 4000 satellites, 390 miles high <http://www.spacex.com/>

OneWeb: 2,400 satellites, 500-590 miles high <http://www.oneweb.world> and <http://www.cnn.com/id/102340448>

Samsung: 4,600 satellites, 930 miles high <http://arxiv.org/ftp/arxiv/papers/1508/1508.02383.pdf>

Facebook: Satellites, drones, and lasers. <http://thenextweb.com/facebook/2014/03/27/facebooks-connectivity-lab-looking-drones-satellites-lasers-provide-internet-access/>

Google: Approximately 100,000 high altitude balloons (62,500 feet) ("Project Loon") <http://www.google.com/loon/>

Iridium Next: 66 satellites, 483 miles high. An existing slow speed system. Launching of the "next generation" (higher speed) satellites is scheduled to begin in October 2015 and to be completed by 2017. <https://www.iridium.com/about/IridiumNEXT.aspx>

Globalstar: 24 satellites, 880 miles high. Already in operation at slow data speeds. <http://www.globalstar.com/en/index.php?cid=8200>

Outernet: 200 nanosatellites (4 inch cubes), 560 miles high. <https://www.outernet.is/en>. Receive-only service to began in 2015, two-way WiFi in four years.