Outlook Admin Team From: 21 March 2017 10:44

Sent:

National Planning Framework To:

Subject: Submission re National Planning Framework

SUBMISSION RE THE "NATIONAL PLANNING FRAMEWORK" AND COUNTY/LOCAL DEVELOPMENT PLANS

21 MARCH 2017

The opportunity to take part in a process of evaluating the sustainability and/or consequences of national/regional or local level plans and programmes for our future in the National Planning Framework and the County/local Development Plan is much appreciated.

The challenges this activity offers must be considered to be worthwhile given that failure to achieve the right balance will see the next generation potentially facing an unsustainable future, an impoverished quality of life and a threat to life-long health and wellbeing.

This submission focuses specifically on the interminable pursuit for a high quality telecommunications system that is seen as critical for the advancement of the economic and social development of the country. The vision is one of a successful future in an 'export-led' 'smart economy'. The literature informs us that a first-class infrastructure is required to enable a 'smart' economy to become established and assurances are given that such a venture will improve the quality of life for citizens and increase the competitiveness of Irish business. Infrastructure here refers to the development of 'a digital services export economy that will only require a high speed broadband network, a renewable electricity supply and our own ingenuity to succeed.' (Government Publication: Building Ireland's Smart Economy, 2008). Easy!

PLANNING/INFRASTRUCTURE

Recognising the democratic principal of involving the public in decision-making, the excitement arising from such an invitation is only suppressed by the daily real experience of the frenzied activity of infrastructure installation already happening on the ground. No time has been wasted in activating the plan for a 'smart' society. The accompanying fast-tracking of applications from service providers regarding this infrastructure has seen planning requirements lose impact through a process of 'watering down' and the easy availability of Test and Trial licences has allowed our island to be used as a test bed. However, a combination of a slowly growing awareness regarding the potential health effects of electromagnetic radiation/radiofrequency fields (including wireless) (EMR/RF or EMF) emitted from masts/antennas/Wi-Fi and the life changing disabling effects some people experience in the vicinity of this infrastructure, has led to a relatively small number of residential group campaigns objecting to having masts placed in their community.

In 2012 the Minister of the Environment, Community and Local Government issued an update to certain sections of the Telecommunications Antennae and Support Structures Guidelines (1996) as used by the planning department. This stated that separation distances from vulnerable places (e.g. schools) in development plans, should not now be included in applications and, conditions limiting the life of telecommunication masts and antennas should cease. The Minister included two reminders i.e. that health grounds should not be considered as part of the planning application and that 'all future Development Contribution Schemes must include waivers for broadband infrastructure provision ... '. The implications of these changes for local communities who might wish to object to such infrastructure was, they could no longer initiate their campaign on policies quoting separation distances as a viable reason to object and, the potential that the previous temporary nature of permission had allowed in challenging application for renewal had ended. (Comment by Mary Doherty on Irish Planning News, Published by David Mulcahy, 2012) http://irishplanningnews.ie/significant-updates-to-telecommunicationplanning-guidelines/ The removal of the word health is explained in a circular letter issued by the Minister of the Environment, Community and Local Government to Directors of Planning, Borough and Town Clerks, An Bord Pleanala and City and County Managers stating that planning authorities "do not have competence for health and safety matters in respect of telecommunications infrastructure. These are regulated by other codes and such matters should not be additionally regulated by the planning process." (Department Environment, Community and Local Government, Circular letter: PL 07/12, Oct. 2012). This decision has allowed planning authorities to avoid accountability for threats to our health emanating from this infrastructure and the gadgets that are powered by it. But should the public be worried about this?

POTENTIAL HEALTH AFFECTS

Three to five per cent of the population are currently suffering from the effects of the now toxic levels of Electromagnetic Radiation/Radio frequency Fields (EMR/RF or EMF) and this figure is estimated to rise to ten per cent and potentially, when 4G/5G is established, twentyfive percent (that is a quarter of the population). EMR/RF is emitted from masts, antennas, all things wireless (Wi-Fi) and 'smart', along with the infrastructure intended to support these. This includes mobile and cordless phones, 'smart' phones, wireless utility meters, computers, iPads, wireless baby monitors and now household appliances with wireless access ability etc. In order to make informed choices about consuming any or all of these, the public should be provided with information about the dangers of EMR/RF as recommended by the Council of Europe, Parliamentary Assembly, Resolution 1815 (2011) 'The Potential Dangers of Electromagnetic Fields and their Effect on the Environment'. http://assemblv.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=17994& The public should also be made aware that in 2011, the World Health Organization's International Agency for Research on Cancer, classified EMF/RF as a 'possible carcinogen (Group 2B)'. http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf We may also ask, when will the public be told about the findings of the National Toxicology Program (2016/17) (USA) activated under the National Institutes of Health, whose research concluded with clear evidence of the occurrence of two types of tumours from cell phone radiation i.e. malignant gliomas of the brain and schwannoma of the heart (linked with acoustic neuromas) and DNA damage? http://biorxiv.org/content/early/2016/05/26/055699

A vast number of scientific peer reviewed studies already exists (estimated to be 22,000) linking adverse health effects to non-thermal EMR/RF. The BioInitiative Report prepared by 29 world-renowned scientists and experts in science and public health included a total of 3,800 peer-reviewed studies in their reports of 2007 and 2012. Collectively these identify and name key scientific Biological Affects providing:

- B. Evidence that Children are More Vulnerable
- C. Evidence for Fetal and Neonatal Effects
- D. Evidence for Effects on Autism (Autism Spectrum Conditions)
- E. Evidence for Electrohypersensitivity
- F. Evidence for Effects from Cell Tower-Level RFR Exposures
- G. Evidence for Effects on the Blood-brain Barrier
- H. Evidence for Effects on Brain Tumors
- I. Evidence for Effects on Genes (Genotoxicity)
- J. Evidence for Effects on the Nervous System (Neurotoxicity)
- K. Evidence for Effects on Cancer (Childhood Leukemia, Adult Cancers)
- L. Melatonin, Breast Cancer and Alzheimer's Disease
- M. Stress, Stress Proteins and DNA as a Fractal Antenna
- N. Effects of Weak-Field Interactions on Non-Linear Biological Oscillators and Synchronized Neural Activity

Stress proteins, HSP, disrupted immune function; Reproduction/fertility effects; Oxidative damage/ROS/DNA damage/DNA repair failure; Disrupted calcium metabolism; Brain tumors and blood-brain barrier; Sleep, neuron firing rate, EEG, memory, learning, behaviour; Cancer (other than brain), cell proliferation; Cardiac, heart muscle, blood-pressure, vascular effects.' (The BioInitiative Report: http://www.bioinitiative.org and http://www.bioinitiative.org (conclusions/

Such diverse symptoms and effects may initially seem incredible but when we understand that our bodies are bioelectrical organisms and that each cell in our body has it's own electromagnetic field, it seems less so. The current levels of man-made artificial electromagnetic fields (EMF) have created a toxic environment. Levels are said to be one million billion times greater than the natural EMF we have adapted to over millions of years. This environmental crisis sees our internal natural EMF experience great difficulties interacting with the now toxic external levels of artificial EMF. People who are affected are referred to as Electrohypersensitives. Electrohypersensitivity (EHS) is an environmental/functional impairment manifested through the symptoms already mentioned. The disabling effects sees many EHS sufferers having no option but to give up their employment or studies and/or move house, perhaps multiple times – See: What is Electrohypersensitivity and Living with Electrohypersensitivity, A Survival Guide:

http://www.weepinitiative.org/areyou.html and http://www.weepinitiative.org/livingwithEHS.html

Emphasis must be placed on the fact that it is the environment that is sick and not these individuals. Electromagnetic radiation is an extremely serious issue not only for humans but also for animals, birds, plants and insects, which are all, affected (bee colony collapse, dieback in trees, depletion of bird populations etc. etc.) – See https://www.mastsanity.org

Individuals react differently to EMR/RF depending on their physical biology, on exposure intensity and duration. From experience we know that people can quickly improve when removed from emission sources. Over time effects can develop into more serious conditions such as those mentioned above. One other prevalent condition worth mentioning that is associated with EMR/RF is Depression/Suicide (see research by Dr Martin Pall, 2015, *Microwave Frequency Electromagnetic Fields (EMFs) produce widespread neuropsychiatric effects including depression*, Journal of Chemical Neuroanatomy, Vol.75 pgs 43 – 51 or: http://www.sciencedirect.com/science/article/pii/S0891061815000599

Given such a frightening list we might ask ourselves why EHS or indeed, the links between EMR/RF and these illnesses are not formally recognised by the Government, authorities or the medical profession and why nothing is being done at Government level in response to this reality.

THE GUIDELINES/THE MECHANISM

In 2007 a four person 'Expert Group' produced a report for the Irish Government entitled *Health Effects of Electromagnetic Fields* (Department of Communications, Marine and Natural Resources). This concluded that no adverse health effects were to be found from exposure to EMR/RF. Guidelines recommended by this 'expert' group were produced by the International Commission on Non-Ionising Radiation Protection (ICNIRP) in 1998. The head of the Irish 'expert' committee was involved in shaping these guidelines whilst in ICNIRP. Reference is made throughout to the World Health Organisation's International EMF Project, which was also established by that same 'expert'. No conflict there then! The ICNIRP guidelines are not only out-dated but are recognised as being fundamentally flawed and inadequate because they refer only to the **thermal, short-term effects** of EMR/RF. Concerned scientists have been striving to highlight the fact that **non-thermal, pulsed and long-term** emissions of EMR/RF are producing the most significant effects on our health. Numerous appeals from scientists and doctors have been sent to the EU, UN, WHO and Governments, for example, in May 2015 the International Electromagnetic Field Scientist Appeal was submitted to the U.N., U.N. Member Nations and the World Health Organization. The appeal asked for more protective EMF guidelines based upon their findings regarding health risks from EMR/RF. This appeal was also sent to the United Nations Environmental Programme, with a request that they evaluate the scientific evidence and propose more protective practices. As of October 10th 2016 the Appeal includes 223 signatures from scientists in 41 Nations – See: https://emfscientist.org/index.php/emf-scientist-appeal

On the basis of the **thermal** paradigm it is claimed that there is no viable biological mechanism for the action of weak non-thermal fields on human tissue. In 2015 Dr. Martin Pall, Professor Emeritus of Biochemistry (Washington State University) demonstrated that one of the primary **non-thermal** effects of EMR/RF is the activation of voltage-gated calcium channels in the plasma membrane of cells. The resultant excess calcium within the cells produces a chain of chemical reactions leading to the production of free radicals and oxidative stress. The interactions of these creates a situation that results in disease and DNA damage – See Dr Pall's evidence of this: http://electromagnetichealth.org/wp-content/uploads/2015/05/reveh-2015.pdf Based upon his findings doubts need to be expressed as to whether plans for the future will improve our quality of life?

FOURTH AND FIFTH GENERATION (LONG TERM EVOLUTION)

This assertion that our quality of life is dependent on the provision of immediate wireless Internet access seems naive. Unfortunately, the more recent use of pulsed radio frequency microwaves (Wi-Fi) has created an added safety risk for humans, animals, plants, insects, birds, and especially for children. We have already moved on from third generation (3G) to fourth generation (4G) including Long Term Evolution. 4G is described as the fastest developing mobile technology ever. At present it is too early to quantify what the long-term health effects will be, but current evidence shows a strong risk of serious consequences for brain health such as a degeneration of the brains neural activity. 4G LTE is considered to be more dangerous than its predecessors. Some research on short-term affects has been undertaken and one such paper is *The Alteration of Spontaneous low frequency oscillations caused by acute Electromagnetic Fields*

Exposure. This can be accessed in the peer reviewed Clinical Neurophysiology Journal (Feb 2014, 125 (2); 277-86) or online: http://www.sciencedirect.com/science/article/pii/S1388245713009760 Despite no available health and safety research this technology has already being thrust upon us.

Now the push is on for the rollout of fifth generation (5G) i.e. a wireless technology that uses a millimetre wave frequency and involves the deployment of millions of small cell wireless antenna sites in preparation for the 'Internet of Things'. This will allow everything to be connected everywhere. No investigation has been undertaken regarding the possible health and safety effects of this or from cumulative exposure to multiple wireless access points/devices. The BioInitiative Group presented a 'Comment re Small Cell Antenna Rollout' at: http://www.bioinitiative.org/small-cell-antenna-rollout/ and another article worth reading is in the Ecologist Magazine, 27th October 2016, 'Wireless pollution 'out of control' as corporate race for 5G gears up' by Lynne Wycherley, http://www.theecologist.org/News/news analysis/2988266/wireless pollution out of control as corporate race for 5g gears up.html Despite the lack of adequate safety testing the European Commission expects to have a Trans-European Telecom Network established by 2025 with access points in centres of community life including public buildings, health centres, parks or town squares and all public spaces. Libraries, schools, universities, transport hubs, train stations, airports, research centres, doctors' surgeries, hospitals and stadiums. (see European Commission's proposal for a European Gigabit Society/Digital Single Market/Trans-European Telecom Network) European Commission COM (2016) 589 final) - See: https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-589-EN-F1-1.PDF

WHAT IS NEEDED:

The public need to be informed about the dangers of EMR/RF especially in light of research and particularly the findings of the National Toxicology Program 2016 (USA).

New public safety limits need to be drawn up that take into account the **non-thermal, low-intensity, pulsed, long-term, chronic and cumulative risks of EMR/RF/Wi-Fi**.

The installation of new wireless technologies (4G and 5G) needs to be halted until such time as possible health effects are properly investigated and addressed.

The Mobile Phone Radiation Warning Bill 2011 needs to be reintroduced and should include all wireless gadgets.

Electrohypersensitivity needs to be formerly recognised as an environmental/functional impairment and clearly defined as being related to EMR/RF/Wi-Fi.

EMR/RF/Wave-free Zones (White Zones) should be made available for Electrosensitives.

Safer technology such as fibre optic should be adopted in preference to wireless technologies. This at least would help in reducing the likelihood of adverse health and environmental affects.

The medical profession need to have some training in environmental health, become more aware of Electrohypersensitivity (EHS) and the EHS assessments that already exist.

All Government Departments and authorities should be held accountable for this critical situation. As things stand no one appears to be taking any responsibility.

Due to a lack of medical, scientific, biological or neurological knowledge it would be unwise for us to link current events with EMR/RF/Wi-Fi for example, a report published by the Royal College of Surgeons in Ireland, *The Mental Health Of Young People in Ireland 2013*, indicates that one in five young people in Ireland is Experiencing a Mental Disorder: http://www.rcsi.ie/index.jsp?
n=110&a=4048
This reflects a similar report by the American Psychological Association which concludes *Children's Mental Problems Seen as 'epidemic*': http://www.apa.org/monitor/dec04/epidemic.aspx

Earlier, the work of Dr Pall on the neuropsychiatric effects of EMR/RF was mentioned. It is difficult not wonder whether this crisis could stem from the introduction of Wi-Fi in schools?

Also, Alzheimer's disease and Dementia have now become the leading cause of death in England and Wales as mortality rates have more than doubled over the past five years. http://www.irishexaminer.com/breakingnews/world/dementia-and-alzheimers-disease-the-leading-cause-of-death-for-first-time-764057.html A study undertaken across 21 countries indicates the staggering increase in cases of dementia i.e. an overall increase of 151%. Many cases are now emerging of people being diagnosed in their 40s i.e. a decade earlier than 20 years ago: <a href="http://surgicalneurologyint.com/surgicalint_articles/neurological-deaths-of-american-adults-55-74-and-the-over-75s-by-sex-compared-with-20-western-countries-1989-2010-cause-for-concern/ And again, it is not unusual to hear of antibiotic-resistant superbugs in our hospitals with wards closed to visitors and patient deaths caused by failure to deal with infections from superbugs. http://www.irishtimes.com/news/health/tallaght-hospital-limits-visitors-over-superbug-outbreak-1.2825637 and http://www.irishtimes.com/news/health/hospital-deaths-caused-by-failure-to-deal-with-infections-claim-1.2877145 Dr. Robert Becker (*The Body Electric, Electromagnetism and the Foundation of Life*, 1985 page 293) informs us that a study undertaken by Yu. N. Achkasova in 1978, who exposed thirteen strains of bacteria to electric and magnetic fields, found clear evidence that an electric field only slightly stronger than earth's background stimulated growth of all bacteria and increased their resistance to antibiotics. In many cases longer exposure produced permanent changes in bacterial metabolism. There

Returning to be beginning of this exercise we thank you again for this opportunity.

currently undertaking in this regard, if any?

Given the content of this submission it would seem somewhat naive to believe that a 'smart' society that improves the quality of life for its citizens is easily attainable, considering the unsustainable costs to our health and our Health Service. The consequential results of ignoring this matter would render the vision put forward as 'stupid' rather than 'smart'. The signs are already there if you dare to see them. We are all left to use our ingenuity on trying to survive the onslaught of EMR/RF/Wi-Fi. We are also responsible for observing and asking question of those we pay to protect our children. After the rollout of 5G it may be too late.

ETHNA MONKS

On behalf of The Irish Electromagnetic Radiation Victims Network (IERVN) https://iervn.com Members of the European Coordination of Organisations for a Regulation of Electromagnetic Field (EMF) Exposure, which Truly Protects Public health.

The European Coordination of organizations for an EMF exposure regulation, which truly protects public health, is driving the European Manifesto in Support the ECI in favour of the precautionary regulation of the EMF exposure. Amongst the signatories to this European Manifesto there are scientists, researchers and experts, as well as professional bodies and associations and representatives of civil society organizations (from health advocates, consumers, neighbours, environmentalists, ecologists, labour union, parents of students, people with central sensitization syndromes -electro-hypersensitivity, multiple chemical sensitivity, chronic fatigue syndrome, fibromyalgia, etc.-, brain tumour patients, concerned citizens and activists associations working in the field of electromagnetic pollution), coming from 26 countries (Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, India, Ireland, Italy, Macedonia, Netherlands, Panama, Poland, Portugal, UK, Russia, South Africa, Slovakia, Spain, Sweden, Switzerland and USA).

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