## From:

## Sent:

To:
Subject:
Attachments:

Deirdre Ní Tuathaláinn
Monday 28 March 2022 15:38
Development Plan
Submission to Draft Clare County Development Plan 2023-2029
Submission regarding the Draft Clare County Development Plan 2023.docx

With regard to the Draft Clare County Development Plan 2023-2029, my submission relates to Clare County Council's approach to planning for telecommunications infrastructure. I am very concerned about the government's policy on public exposure to electromagnetic radiation and the planning legislation which has evolved since the introduction of the Telecommunications Antennae and Support Guidelines 1996 of the Department of Housing, Local Government and Heritage. The legislation in effect has allowed the telecommunications industry to have preferential treatment and has resulted in the proliferation of telecommunications structures around Co. Clare and the rest of the country, many of which have been erected in highly inappropriate areas - next to homes, schools, workplaces, hospitals etc. and even over crèches. We don't need more of such masts with their wireless technology as we now have the option for wired fibre broadband, which is safer, more reliable and more cyber secure and I feel strongly that the Council should aim to cease planning permissions for telecommunications structures/antennae especially near homes and schools, prioritise and incentivise the use of wired technology and that this should be reflected in the Draft Clare County Development Plan.
Not only do these structures have a very negative visual impact on communities, scenic areas, sites of heritage and archaeological importance and devalue properties but there are other concerns also regarding their harmful effects on health from their emissions, which has been demonstrated in thousands of independent peer-reviewed studies.

In this regard I suggest that the Council amends some points of the current County Development Plan regarding telecommunications structures as follows:

AMEND Section 8.8.10 at the end of Chapter 8:
......The Planning Authority will work with the telecommunications providers to facilitate the development of infrastructure that respects the recognised values of the natural and built heritage and will seek to encourage the co-location of masts and antennae on existing structures within the County and will encourage the preferred option of wired fibre broadband. Operators shall be required to submit documentary evidence as to the non-feasibility of this option in planning applications for new structures and shall submit details of correspondence with other telecommunications operators addressing the sharing of mast facilities in the area. They shall also indicate in the application whether they are willing to share the proposed masts with other telecommunication operators.

AMEND CDP8.44 Development Plan Objective: Telecommunications Infrastructure:

It is an objective of the Development Plan:
To facilitate the provision of telecommunications services at appropriate locations within the County having regard to the DoEHLG 'Telecommunications Antennae and Support Structures, Guidelines for Planning Authorities 1996 (as updated by PL07/20 of 2020)

## INSERT:

It is an objective of the Council to locate telecommunications masts in non-scenic areas, or in areas where they are unlikely to intrude on the setting of, or views of/from, national monuments or protected structures or have an adverse effect on the environment inluding the integrity of Natura 2000 sites. Standalone telecommunication installations will not generally be favoured in residential areas, beside schools, on land where development may be restricted or prevented for amenity or environmental reasons or in areas that are architecturally important.

Applications for permission shall, where possible avoid the following areas:- - Nationally, European or Internationally designated sites, • Primary and Secondary Special Amenity Areas, • Protected views and prospects, • Archaeological/geological sites, • Listed structures and monuments.

Any proposals for development in the areas referred to above will require the applicant to outline in detail the need to locate at this specific location and the alternatives considered. The Planning Authority will show due deference to individuals, residents, communities, institutions and amenities in dealing with telecommunication masts.

The Council will require, where antennae are erected, that the beam of greatest intensity from a base's station should not fall on any part of a school or creche grounds or buildings without agreement from the school and parents. Where an operator submits an application for planning permission for the installation, alteration or replacement of a mobile phone base station, whether at or near a school or college, the operator must provide evidence that they have consulted with the relevant body of the school or college. When considering an application for planning permission for the installation, alteration or replacement of a mobile base station at or near a school or college, the Council should consult the relevant bodies, and should take into account any relevant views expressed. Consultation should be in the form of written notification to the school governing body, inviting their comments by a specific date.

My concerns are based on the huge volume of independent peer reviewed scientific studies which demonstrate the harmful effects of electromagnetic fields to health, all forms of life and the environment. The Bioinitiative Working Group for example, an international collaboration of prestigious scientists and public health experts from across the world, has reviewed thousands of peer reviewed scientific papers. They reported that chronic exposure to even low-level EMF/RFWi-Fi emitted including from masts/antennae can cause adverse health effects. The 2007 report includes 2,000 studies, the 2012 report an additional 1,800 studies. The collective studies in the Biolnitiative Report identified key scientific biological effects with peer reviewed evidence from independent scientific research:

- Children are more vulnerable
- Fetal and Neonatal Effects
- Effects on Autism (Autism Spectrum Conditions) • Electrohypersensitivity • Effects from Cell Tower-Level RFR Exposures • Effects on the Blood-brain Barrier • Damage to Sperm and Reproduction • Effects on Brain Tumours • Effects on Genes (Genetoxicity) • Effects on the Nervous System (Neurotoxicity) • Effects on Cancer (Childhood Leukemia, Adult Cancers) • Melatonin, Breast Cancer and Alzheimer's Disease • Stress, Stress Proteins and DNA as a Fractal Antenna - Effects of Weak-Field Interactions on Non-Linear Biological Oscillators and Synchronized Neural Activity.
More at: Biolnitiative 2012 - Summary for the Public (2014 Supplement)
https://scanner.topsec.com/?r=show\&d=1293\&t=4ecf83cab517efc8d50a214c33a5356f7b5946a8\&u=https\%3A\%2F \%2Fbioinitiative.org\%2Fwp-content\%2Fuploads\%2Fpdfs\%2Fsec01_2012_summary_for_public.pdf

The National Toxicology Programme released the results of the longest (10 years) and most expensive study to date on mobile phones and cancer in November 2018, which found "clear evidence" that male rats exposed to high levels of radio frequency radiation (RFR) like that used in 2G and 3G mobile phones developed cancerous heart tumours. Higher incidences of brain and adrenal tumours were also seen.
https://scanner.topsec.com/?r=show\&d=1293\&t=0891984217be72ac1f311e97d228882370261fd8\&u=https\%3A\%2 F\%2Fehtrust.org\%2Fclear-evidence-of-cancer-from-cell-phone-radiation-u-s-national-toxicology-program-releases-final-report-on-animal-study\%2F\%3Ffbclid\%3DIwAR2EzTMUTcsQg6tdXDODjH0XCoxbe5776Zpnol6HhskeXk3tPVmkAyTthk

Specific studies show higher rates of illnesses and cancers in those living near mobile masts. Here is just a small sample:

- Prof. Girish Kumar found in his study "Radiation Hazards from Cell Phones/Cell Towers" that people living within a 50-300 meter radius are in the high radiation zone and are more prone to ill effects of electromagnetic radiation. https://scanner.topsec.com/?r=show\&d=1293\&t=da4fb3dabd705ab9fa70fd6e784613276d0e78dd\&u=htt ps\%3A\%2F\%2Fwww.robindestoits.org\%2Fattachment\%2F337945\%2F
- The study entitled, "Impact of radiofrequency radiation on DNA damage and antioxidants in peripheral blood lymphocytes of humans residing in the vicinity of mobile phone base station" (Zothansiama et al, 2017) was published in Electromagnetic Biology and Medicine. It compared people living close (within 80 meters) and far (over 300 meters) from cellular antennae and found that the people living closer to the antennae had a much higher RF exposure and statistically significant effects - increases in blood damage considered biomarkers predictive of cancer.
- The study "Neurobehavioural effects among inhabitants around mobile phone base stations" found that "Inhabitants living nearby mobile phone base stations are at risk for developing neuropsychiatric problems and some changes in the performance of neurobehavioral functions"

It is also significant from a planning perspective that the Irish Medical Organisation (IMO) passed the following motions at their AGM in 2010 relating to non-ionising radiation, which means they are now the offical policy of the IMO:
-07/29 This AGM recommends that the recommendation of the Joint Committee on Communications, Marine and Natural Resources on 'Non-ionising radiation from mobile phone handsets and masts' be implemented.

- 05/25 That in light of ongoing uncertanty and in view of accumulating evidence, in vivo and in-vitro, of discernible effects on structure and function of tissues resulting from non-ioinising radiation, that this Organisation; urges the Government to restrict the use of cell phones by children and prohibits the erection of cell phone base station transmitters on or near schools. - 01/32 In view of the increasing concerns regarding the possible adverse health effects from microwave radiations the IMO requests the Minister for the Environment to require that a health warning, relating to these possible adveres health effects, particularly for those under eighteen years of age, be issued with all mobile phones.
https://scanner.topsec.com/?r=show\&d=1293\&t=b6ba3c09d8b6eb3bb65e97f58ff9aab12dd15a37\&u=https\%3A\%2F \%2Fwww.imo.ie\%2Fpolicy-international-affair\%2Fdocuments\%2Fpolicy-archive\%2Fimo-motions-and-policy-handbook\%2FIMO-Policy-Handbook-2010.pdf

In 2011 The World Health Organisation and International Agency for Research on Cancer (IARC) classified all Electromagnetic Fields/Radio Frequency (EMF/RF/Wi-Fi) used to power modern technology and emitted by masts/antennaes and technological devices, as a Class 2B Carcinogen. The body of evidence is growing to suggest that it should be re-classified as a Class 1 carcinogen.
https://scanner.topsec.com/?r=show\&d=1293\&t=544450e5880d502e720963bbd0185e140f5e4256\&u=http\%3A\%2F \%2Fwww.iarc.fr\%2Fwp-content\%2Fuploads\%2F2018\%2F07\%2Fpr208_E.pdf

Following the WHO classification, the Parliamentary Assembly of the Council of Europe adopted Resolution 1815 in which it considered that there was sufficient proof of the potentially harmful effects of electromagnetic fields (EMFs) on health and the environment. The resolution outlined several recommendations on the dangers of EMFs to the member states concerning the use of mobile phones and WiFi networks. It described the standards on exposure to EMFS set by the ICNIRP as having "serious limitations" and stated that:
..."the precautionary principle should be applied when scientific evaluation doesn't allow the risk to be determined with sufficient certainty. Given the context of growing exposure of the population, in particular that of vulnerable groups such as young people and children, there could be extremely high human and economic costs if early warnings are neglected......Waiting for high levels of scientific and clinical proof before taking action to prevent wellknown risks can lead to very high health and economic costs, as was the case with asbestos, leaded petrol and tobacco".
https://scanner.topsec.com/?r=show\&d=1293\&t=b5c5ed1e50de6c42abf6194071d87759c7bb684a\&u=https\%3A\%2 F\%2Fassembly.coe.int\%2Fnw\%2Fxml\%2FXRef\%2FXref-XML2HTML-en.asp\%3Ffileid\%3D17994

The following month our own Chief Medical Officer, Tony Holohan made the statement "We may not truly understand the health effects of mobile phones for many years.....There is general consensus that children are more vulnerable to radiation from mobile phones than adults. Therefore the sensible thing to do is to adopt a precautionary approach rather than wait to have the risks confirmed".

In 2016, the European Directive, "Safety, Health and Welfare at work Electromagnetic Fields) Regulations 2016" were transposed into Irish law. These regulations include information on the risks of non-thermal effects of EMF/RF/Wi-Fi "......- such as stimulation of muscles, nerves or sensory organs. These effects might have a detrimental effect on the mental and physical health of exposed employees." The sources of EMFs include but are not limited to $\mathrm{Wi}-\mathrm{Fi}, 2 \mathrm{G}, 3 \mathrm{G}, 4 \mathrm{G}, 5 \mathrm{etc}$. The regulations also impose duties on employers to avoid and reduce risks from EMFs and when to carry out risk assessments etc. The regulations identify groups "at particular risk" as being the following: pregnant employees, employees who wear active or passive implanted medical devices such as cardiac pacemakers and employees with medical devices worn on the body, such as insulin pumps.

Regardless of whether or not you believe EMF non-ionising radiation exposure to be safe, the Regulations in Ireland/EU clearly state that it is not safe and that it presents a particular health risk to the groups of workers above and that specific risk assessments must take place. It stands to reason that if workers can suffer adverse effects from EMFs, then the residents and children in particular, who live near telecommunications structures and antennae, which have been erected around the country are also at risk and must be protected.
https://scanner.topsec.com/?r=show\&d=1293\&t=5760b5cb717c0eff8161dd721db34a529403c164\&u=http\%3A\%2F \%2Fwww.irishstatutebook.ie\%2Feli\%2F2016\%2Fsi\%2F337\%2Fmade\%2Fen\%2Fpdf

Professor Tom Butler's 'Review of the Health Risks of Radiofrequency Radiation Employed in 5G Technology and the Implications for UK Policymaking' is very relevant to our situation in Ireland and provides an excellent scientific summary of why we should be concerned about the health risks of wireless
radiation. $\quad h t t p s: / / s c a n n e r . t o p s e c . c o m / ? r=s h o w \& d=1293 \& t=696 b 4 c 85 a 00 e 3345 b 6$
14cd0507d4d56f449e48d6\&u=https\%3A\%2F\%2Fecfsapi.fcc.gov\%2Ffile\%2F10604943924787\%2FProf-Tom-Butler-Submission-on-5G-RFR-Final-27-05-2020-1.pdf
If the thousands of studies warning of the dangers of electromagnetic radiation don't convince you of the serious risks to health, it should be enough to confirm that at the very least there is a serious doubt about its safety and therefore the precautionary principle should be applied.
It is vital that the safety of the Irish public is prioritised over the interests of the telecommunications industry and I would appreciate if you would take my concerns into account when drafting the new Clare County Development Plan.

Deirdre Ní Tuathaláinn
(I have attached a Word document with the above text in case it is your preferred format)

## Submission regarding the Draft Clare County Development Plan 2023-2029

I am very concerned about the government's policy on public exposure to electromagnetic radiation and the planning legislation which has evolved since the introduction of the Telecommunications Antennae and Support Guidelines 1996 of the Department of Housing, Local Government and Heritage. The legislation in effect has allowed the telecommunications industry to have preferential treatment and has resulted in the proliferation of telecommunications structures around Co. Clare and the rest of the country, many of which have been erected in highly inappropriate areas - next to homes, schools, workplaces, hospitals etc. and even over crèches. We don't need more of such masts with their wireless technology as we now have the option for wired fibre broadband, which is safer, more reliable and more cyber secure and I feel strongly that the Council should aim to cease planning permissions for telecommunications structures/antennae especially near homes and schools, prioritise and incentivise the use of wired technology and that this should be reflected in the Draft Clare County Development Plan. Not only do these structures have a very negative visual impact on communities, scenic areas, sites of heritage and archaeological importance and devalue properties but there are other concerns also regarding their harmful effects on health from their emissions, which has been demonstrated in thousands of independent peer-reviewed studies.

In this regard I suggest that the Council amends some points of the current County Development Plan regarding telecommunications structures as follows:

AMEND Section 8.8.10 at the end of Chapter 8: ......The Planning Authority will work with the telecommunications providers to facilitate the development of infrastructure that respects the recognised values of the natural and built heritage and will seek to encourage the co-location of masts and antennae on existing structures within the County and will encourage the preferred option of wired fibre broadband. Operators shall be required to submit documentary evidence as to the non-feasibility of this option in planning applications for new structures and shall submit details of correspondence with other telecommunications operators addressing the sharing of mast facilities in the area. They shall also indicate in the application whether they are willing to share the proposed masts with other telecommunication operators.

AMEND CDP8.44 Development Plan Objective: Telecommunications Infrastructure:
It is an objective of the Development Plan
To facilitate the provision of telecommunications services at appropriate locations within the County having regard to the DoEHLG 'Telecommunications Antennae and Support Structures, Guidelines for Planning Authorities 1996 (as updated by PL07/20 of 2020)

INSERT:
It is an objective of the Council to locate telecommunications masts in non-scenic areas, or in areas where they are unlikely to intrude on the setting of, or views of/from, national monuments or protected structures or have an adverse effect on the environment inluding the integrity of Natura 2000 sites. Standalone telecommunication installations will not generally be favoured in residential areas, beside schools, on land where development may be restricted or prevented for amenity or environmental reasons or in areas that are architecturally important.

Applications for permission shall, where possible avoid the following areas:-

- Nationally, European or Internationally designated sites,
- Primary and Secondary Special Amenity Areas,
- Protected views and prospects,
- Archaeological/geological sites,
- Listed structures and monuments.

Any proposals for development in the areas referred to above will require the applicant to outline in detail the need to locate at this specific location and the alternatives considered. The Planning Authority will show due deference to individuals, residents, communities, institutions and amenities in dealing with telecommunication masts.

The Council will require, where antennae are erected, that the beam of greatest intensity from a base's station should not fall on any part of a school or creche grounds or buildings without agreement from the school and parents. Where an operator submits an application for planning permission for the installation, alteration or replacement of a mobile phone base station, whether at or near a school or college, the operator must provide evidence that they have consulted with the relevant body of the school or college. When considering an application for planning permission for the installation, alteration or replacement of a mobile base station at or near a school or college, the Council should consult the relevant bodies, and should take into account any relevant views expressed. Consultation should be in the form of written notification to the school governing body, inviting their comments by a specific date.

My concerns are based on the huge volume of independent peer reviewed scientific studies which demonstrate the harmful effects of electromagnetic fields to health, all forms of life and the environment. The Bioinitiative Working Group for example, an international collaboration of prestigious scientists and public health experts from across the world, has reviewed thousands of peer reviewed scientific papers. They reported that chronic exposure to even low-level EMF/RFWi-Fi emitted including from masts/antennae can cause adverse health effects. The 2007 report includes 2,000 studies, the 2012 report an additional 1,800 studies. The collective studies in the BioInitiative Report identified key scientific biological effects with peer reviewed evidence from independent scientific research:

- Children are more vulnerable
- Fetal and Neonatal Effects
- Effects on Autism (Autism Spectrum Conditions)
- Electrohypersensitivity
- Effects from Cell Tower-Level RFR Exposures
- Effects on the Blood-brain Barrier
- Damage to Sperm and Reproduction
- Effects on Brain Tumours
- Effects on Genes (Genetoxicity)
- Effects on the Nervous System (Neurotoxicity)
- Effects on Cancer (Childhood Leukemia, Adult Cancers)
- Melatonin, Breast Cancer and Alzheimer's Disease
- Stress, Stress Proteins and DNA as a Fractal Antenna
- Effects of Weak-Field Interactions on Non-Linear Biological Oscillators and Synchronized Neural Activity.
More at: BioInitiative 2012 - Summary for the Public (2014 Supplement)
https://bioinitiative.org/wp-content/uploads/pdfs/sec01_2012_summary_for_public.pdf
The National Toxicology Programme released the results of the longest ( 10 years) and most expensive study to date on mobile phones and cancer in November 2018, which found "clear evidence" that male rats exposed to high levels of radio frequency radiation (RFR) like that used in 2G and 3G mobile phones developed cancerous heart tumours. Higher incidences of brain and adrenal tumours were also seen.
https://ehtrust.org/clear-evidence-of-cancer-from-cell-phone-radiation-u-s-national-toxicology-program-releases-final-report-on-animal-
study/?fbclid=IwAR2EzTMUTcsQg6tdXD0DjH0XCoxbe5776Z-pnoI6HhskeXk3tPVmkAyTthk
Specific studies show higher rates of illnesses and cancers in those living near mobile masts. Here is just a small sample:
- Prof. Girish Kumar found in his study "Radiation Hazards from Cell Phones/Cell Towers" that people living within a 50-300 meter radius are in the high radiation zone and are more prone to ill effects of electromagnetic radiation. https://www.robindestoits.org/attachment/337945/
- The study entitled, "Impact of radiofrequency radiation on DNA damage and antioxidants in peripheral blood lymphocytes of humans residing in the vicinity of mobile phone base station" (Zothansiama et al, 2017) was published in Electromagnetic Biology and Medicine.

It compared people living close (within 80 meters) and far (over 300 meters) from cellular antennae and found that the people living closer to the antennae had a much higher RF exposure and statistically significant effects - increases in blood damage considered biomarkers predictive of cancer.

- The study "Neurobehavioural effects among inhabitants around mobile phone base stations" found that "Inhabitants living nearby mobile phone base stations are at risk for developing neuropsychiatric problems and some changes in the performance of neurobehavioral functions"

It is also significant from a planning perspective that the Irish Medical Organisation (IMO) passed the following motions at their AGM in 2010 relating to non-ionising radiation, which means they are now the offical policy of the IMO:
$-07 / 29$ This AGM recommends that the recommendation of the Joint Committee on Communications, Marine and Natural Resources on 'Non-ionising radiation from mobile phone handsets and masts' be implemented.
-05/25 That in light of ongoing uncertanty and in view of accumulating evidence, in vivo and invitro, of discernible effects on structure and function of tissues resulting from non-ioinising radiation, that this Organisation; urges the Government to restrict the use of cell phones by children and prohibits the erection of cell phone base station transmitters on or near schools.

- 01/32 In view of the increasing concerns regarding the possible adverse health effects from microwave radiations the IMO requests the Minister for the Environment to require that a health warning, relating to these possible adveres health effects, particularly for those under eighteen years of age, be issued with all mobile phones.
https://www.imo.ie/policy-international-affair/documents/policy-archive/imo-motions-and-policy-handbook/IMO-Policy-Handbook-2010.pdf

In 2011 The World Health Organisation and International Agency for Research on Cancer (IARC) classified all Electromagnetic Fields/Radio Frequency (EMF/RF/Wi-Fi) used to power modern technology and emitted by masts/antennaes and technological devices, as a Class 2B Carcinogen. The body of evidence is growing to suggest that it should be re-classified as a Class 1 carcinogen.
http://www.iarc.fr/wp-content/uploads/2018/07/pr208_E.pdf
Following the WHO classification, the Parliamentary Assembly of the Council of Europe adopted Resolution 1815 in which it considered that there was sufficient proof of the potentially harmful effects of electromagnetic fields (EMFs) on health and the environment. The resolution outlined several recommendations on the dangers of EMFs to the member states concerning the use of mobile phones and WiFi networks. It described the standards on exposure to EMFS set by the ICNIRP as having "serious limitations" and stated that:
..."the precautionary principle should be applied when scientific evaluation doesn't allow the risk to be determined with sufficient certainty. Given the context of growing exposure of the population, in particular that of vulnerable groups such as young people and children, there could be extremely high human and economic costs if early warnings are neglected......Waiting for high levels of scientific and clinical proof before taking action to prevent well-known risks can lead to very high health and economic costs, as was the case with asbestos, leaded petrol and tobacco". https://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=17994

The following month our own Chief Medical Officer, Tony Holohan made the statement
"We may not truly understand the health effects of mobile phones for many years.....There is general consensus that children are more vulnerable to radiation from mobile phones than adults. Therefore the sensible thing to do is to adopt a precautionary approach rather than wait to have the risks confirmed".

In 2016, the European Directive, "Safety, Health and Welfare at work Electromagnetic Fields) Regulations 2016" were transposed into Irish law. These regulations include information on the risks of non-thermal effects of EMF/RF/Wi-Fi "......-such as stimulation of muscles, nerves or sensory organs. These effects might have a detrimental effect on the mental and physical health of exposed employees." The sources of EMFs include but are not limited to Wi-Fi, 2G, 3G, 4G, 5G
etc. The regulations also impose duties on employers to avoid and reduce risks from EMFs and when to carry out risk assessments etc. The regulations identify groups "at particular risk" as being the following: pregnant employees, employees who wear active or passive implanted medical devices such as cardiac pacemakers and employees with medical devices worn on the body, such as insulin pumps.

Regardless of whether or not you believe EMF non-ionising radiation exposure to be safe, the Regulations in Ireland/EU clearly state that it is not safe and that it presents a particular health risk to the groups of workers above and that specific risk assessments must take place. It stands to reason that if workers can suffer adverse effects from EMFs, then the residents and children in particular, who live near telecommunications structures and antennae, which have been erected around the country are also at risk and must be protected.
http://www.irishstatutebook.ie/eli/2016/si/337/made/en/pdf
Professor Tom Butler's 'Review of the Health Risks of Radiofrequency Radiation Employed in 5G Technology and the Implications for UK Policymaking' is very relevant to our situation in Ireland and provides an excellent scientific summary of why we should be concerned about the health risks of wireless radiation.
https://ecfsapi.fcc.gov/file/10604943924787/Prof-Tom-Butler-Submission-on-5G-RFR-Final-27-05-2020-1.pdf
If the thousands of studies warning of the dangers of electromagnetic radiation don't convince you of the serious risks to health, it should be enough to confirm that at the very least there is a serious doubt about its safety and therefore the precautionary principle should be applied. It is vital that the safety of the Irish public is prioritised over the interests of the telecommunications industry and I would appreciate if you would take my concerns into account when drafting the new Clare County Development Plan.

Deirdre Ní Tuathaláinn

