



13 Feburary 2024

Ref: DOIA 2324-1443

J Bruning

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Tēnā koe J Bruning

Thank you for your email of 9 January 2024 to the Ministry of Business, Innovation and Employment (MBIE) requesting, under the Official Information Act 1982 (the OIA), information regarding the the Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016 (NESTF Regulations) as well as the Radiocommunications Regulations 2001, Radiocommunications Act 1989 and the Telecommunications Act 2001.

I have addressed each of your questions in turn below.

[1] MBIE is the responsible agency for establishing and maintaining maximum exposure limits for the public. NESTF 2016 Users Guide states 'The standard sets maximum exposure limits for the public that are around 50 times lower than the recognised threshold for established effects.'

For clarification, MBIE not a health authority and in citing the NZS 2722.1: 1999 as a threshold within the National Environmental Standard for Telecommunications (NESTF), MBIE relies on advice from the Ministry of Health. The Ministry of Health is the expert provider of advice on health effects from electromagnetic fields and monitors the research in this area, including the potential effects of frequencies expected to be used for 5G technologies.

The Ministry of Health advises that the New Zealand standard is based on the best available international advice, including from the International Commission on Non-Ionizing Radiation Protection (ICNIRP). NZS 2772.1's limits are recommended by ICNIRP which the World Health Organisation (WHO) recognises for its independence and expertise in this area.

The NESTF exists to help standardise the approach local authorities take to managing the broad range of environmental effects associated with specified telecommunications facilities. The standard for exposure to radiofrequency fields (in NZS 2722.1: 1999) is incorporated within the NESTF as one of a number of measurable thresholds against which environmental effects are assessed. Such thresholds are used to determine whether a particular environmental effect is able to be sufficiently avoided, remedied or mitigated (and so not trigger the need for a resource consent under the Resource Management Act 1991).

In regard to MBIE's primary responsibilities under the Telecommunications Act 2001, these relate to matters such as the regulation of access to the telecommunications market and the regulation of wholesale telecommunications services to promote competition.

In regard to MBIE's responsibilities under the Radiocommunications Act 1989, these concern the allocation and administration of management rights and licences to use the radio spectrum for commercial, private or public purposes. MBIE is also responsible for ensuring compliance with licenses and the management of radiofrequency interference.

(i) Please transparently disclose these maximum exposure limits (which I presume is detailed in NZS 2772.1:1999) for the public (do not refer me to a paywalled PDF document). This includes residential exposure limit standards for acute and chronic exposure limits.

The exposure limits are detailed in NZS 2722.1: 1999, which is a document that is produced and owned by Standards New Zealand. However, you may wish to visit the WHO website which contains numerial information on the limits used by many countries (including New Zealand) here: https://www.who.int/data/gho/data/themes/topics/indicator-groups/indicator-group-details/GHO/exposure-limits-for-radio-frequency-fields-(public).

(ii) Please state what the 'recognised threshold for established effects' is and supply complete citations for the scientific studies used to establish the threshold level.

As noted above, MBIE relies on advice from the Ministry of Health. General information on the work of the Ministry of Health in respect to radio frequency fields can be found here: https://www.tewhatuora.govt.nz/our-health-system/environmental-health/non-ionising-radiation/radiofrequency-field-exposure-standard. The Ministry of Health is informed by the work of ICNIRP who carry out and review research on thresholds as part of their reports (e.g. https://www.icnirp.org/cms/upload/publications/ICNIRPrfgdl2020.pdf).

(iii) Please advise names of all New Zealand-based expert public-sector scientists/technical experts who have supplied expert information or reports discussing the safety of these standards (NZS 2772.1: 1999), during the period January 2020 and December 2023.

This information is held by the Ministry of Health. I note a similar request was made under the OIA to the Ministry of Health in November 2022, although that request was not specifically in relation to in NZS 2722.1: 1999 itself. The OIA request and response can be found here: https://fyi.org.nz/request/21286-current-list-of-members-of-interagency-committee-on-the-health-effects-of-non-ionising-radiation-meeting-minutes-and-processes.

The Ministry of Health also participates in a WHO project on the health effects of electromagnetic fields. See here for more information: https://www.who.int/health-topics/electromagnetic-fields#tab=tab 1.

- [2] (a) Please advise which funding schemes have been established; and which public-sector funding pots have been established by MBIE, to enable the following activities to be undertaken by publicly-funded, non-industry researchers:
- (i) Long-term or spot assessments to monitor and record levels of microwave radiation in New Zealand urban environments in order to assess effects from increasing proliferation of cellular communications systems.
- (ii) Methodological reviews of the scientific literature to assess the evidence on health risk from non-thermal radiofrequency fields exposures based on proximity to base stations or small cell devices.
- (iii) Assessments of chronic (long-term) risk to vulnerable populations: including infants, children; and people with electromagnetic hypersensitivity and microwave syndrome.

- (iv) Cost-benefit analyses of cost, speed, reliability and energy efficiency of 5G communications in comparison to existing broadband and wired solutions.
- (b) Please supply research received by MBIE discussing issues (i) (iv).

No specific MBIE-administered funding scheme has been set up for the particular research activities and researchers you have listed. MBIE is therefore refusing this part of your request under section 18(e) of the Act, as the document alleged to contain the information requested does not exist or, despite reasonable efforts to locate it, cannot be found.

[3] (a) Please advise what funding has been set aside for MBIE as regulator with oversight to investigate citizen complaints of health deterioration following the installation of base stations, small-cell devices or 5G or wireless 'smart' meters in proximity to their residence. (b) Please advise the name of the database established to record complaints.

No such specific funding or complaint databases exist within MBIE relating to health deterioration associated with radiofrequency emitting equipment. MBIE is therefore refusing this part of your request under section 18(e) of the Act, as the document alleged to contain the information requested does not exist or, despite reasonable efforts to locate it, cannot be found.

However, it may interest you to know that before a cell tower site is constructed, the site operator is required to submit a report to the local authority predicting whether exposures in areas around the site that are reasonably accessible to the public will comply with the public limit in the New Zealand exposure Standard. This report must take into account exposures from existing sites nearby.

If exposures in areas that are reasonably accessible to the public are predicted to exceed 25 per cent of the public limit in the New Zealand exposure Standard, the site operator is required to submit a report to the local authority confirming whether exposures in those areas do comply with the public limit. Some mobile phone network operators commission independent monitoring of exposures to radiofrequency fields in public areas near their cell towers. This monitoring finds that exposures are less than the limit set for the public in the New Zealand Standard. Results from monitoring of sites is available at: https://www.tewhatuora.govt.nz/our-health-system/environmental-health/non-ionising-radiation/independent-cellsite-monitoring/

[4] Please supply all memos/reports/emails reviewing global levels and best practice RFR standards regarding maximum exposure limits for the public.

MBIE does not independently review information regarding maximum exposure levels. Information regarding international practice in respect to health impacts is held by the Ministry of Health and the WHO.

[5] Please supply memos/reports/emails discussing the potential lowering of New Zealand RFR standards.

(Note: The paper Ministry of Health. 2022. Interagency Committee on the Health Effects of Non-ionising Fields: Report to Ministers 2022, does not attempt to review the scientific literature but rather, serves as a discussion paper which only vaguely covers the content above and cites often quite old, or narrow in scope research. As such, it is not sufficiently rigorous for regulatory purposes.)

The Ministry of Health is responsible for expert advice on the health effects from electromagnetic fields and monitors the research in this area. The Ministry of Health considers reports such as the 2020 ICNIRP guidelines (https://www.icnirp.org/cms/upload/publications/ICNIRPrfgdl2020.pdf) which contain various details about thresholds and health effects as well as a reference list of documents which were considered when preparing the guidelines.

In our view, it would have been necessary under section 14 of the OIA to transfer much of your request to the Ministry of Health because the information you requested is more closely connected with its functions. However, your request specifically states you do not wish this request to be shared with the Ministry of Health. Therefore, we have not transferred.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Nāku noa, nā

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Digital, Communications and Transformation