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Our mission is to ensure that environment & communities are safe from harmful electro-magnetic radiation.

OPEN LETTER IN THE PUBLIC INTEREST

ECSFR COMMENTS ON THE DRAFT "STANDARD FOR LIMITING EXPOSURE TO RADIOFREQUENCY FIELDS – 100KHz to 300GHz ("The Standard")

Released by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) on 31 August, 2020.

Submitted to: ARPANSA Committee Members.

Dear ARPANSA Public Servants,

Thank you for your invitation to comment.

ECSFR note that the manner in which you have invited comment via an online form, greatly limits the opportunity for relevant comment.

That is, there is no scope to comment on the standards development process, the validity of the standard, the relevance of risk or how this Standard operates as a regulatory instrument.

On this basis, ECSFR, will be issuing an open letter to ARPANSA (which will be sent to relevant agencies and posted on our web site: www.ECSFR.com.au) to address these important issues.

LEGAL VALIDITY AND ENFORCABILITY OF THE STANDARD.

1. The Australian Constitution provides the Commonwealth powers over health as follows:

    a. (ix) quarantine;

    b. By new section 51(xxiiiA), the 'social services' referendum of 1946 further empowered the Commonwealth to make laws with respect to: The provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not do as to authorize any form of civil conscription), benefits to students and family allowances.

2. Therefore there appears to be no basis under which the Federal Government may regulate health matters as they pertain to The Standard.

3. The objective of the AUSTRALIAN RADIATION PROTECTION AND NUCLEAR SAFETY ACT 1998 - SECT 3, states: *"The object of this Act is to protect the health and safety of people, and to protect the environment, from the harmful effects of radiation."*

4. Section 15 of the ARPANS Act states that the CEO has the following functions:
(1) The CEO has the following functions[1]:

> (a) to promote uniformity of radiation protection and nuclear safety policy and practices across jurisdictions of the Commonwealth, the States and the Territories;
> (b) to provide advice on radiation protection, nuclear safety and related issues;
> (c) to undertake research in relation to radiation protection, nuclear safety and medical exposures to radiation;
> (d) to provide services relating to radiation protection, nuclear safety and medical exposures to radiation;
> (e) to accredit persons with technical expertise for the purposes of this Act;
> (f) to monitor the operations of ARPANSA, the Council, the Radiation Health Committee and the Nuclear Safety Committee;
> (g) to report on the operations of ARPANSA, the Council, the Radiation Health Committee and the Nuclear Safety Committee;
> (h) to monitor compliance with Division 1 of Part 5 and make recommendations to the Director of Public Prosecutions;
> (i) such other functions as are conferred by this Act, the regulations or any other law.

5. ECSFR note that the object of the Act is not to inform, research or advise, but to …*protect the health and safety of people and the environment.*

6. To *protect* one must have enforcement provisions, penalties and so on as is common with legislation that seeks to protect. Such legislation may have regulatory instruments such as regulations and standards that are relied upon in the enforcement. That is an enforceable standard.

7. Considering the above, it becomes clear that should the ARPANSA Act seek to enforce a health standard, this would be unconstitutional and that all ARPANSA may do, as is evidenced by the powers of the CEO is to advise.

[1] Underline has been added by the Author.

8. Indeed ARPANSA make it clear in their disclaimer that the information they produce is for advice only:

"PROVISION OF EDUCATION AND RESEARCH INFORMATION ONLY
Nothing contained in this site is intended to be used as medical advice and it is not intended to be used to diagnose, treat, cure or prevent any disease, nor should it be used for therapeutic purposes or as a substitute for your own health professional's advice. ARPANSA does not accept any liability for any injury, loss or damage incurred by use of or reliance on the information."

9. ICNIRP, on which The Standard is based (against the recommendation of the 2001 Australian Senate Report) and is considered to be International Best Practice (IBP), by ARPANSA, have similar disclaimers. ICNIRP will be discussed later.

STANDARDS DEVELOPMENT

10. The Standard has not been developed by an independent consultative body such as the International Standards Organisation (ISO) nor by Standards Australia. As such The Standard does not follow the international principles of: "*Openness and transparency, Consensus and Balance of representation*" [2].

11. Initially (2001/2) the Standard setting process followed a transparent and consultative processes as is expected of a credible ISO (www.iso.org) or Australian Standard published by Standards Australia. Indeed Standards Australia was involved with ARPANSA. However, the process was seemingly 'hijacked' by ARPANSA/Industry to avoid addressing issues that were known in 2002 and are known today (18 years later) as causing harm. To quote the Final Minutes of the Radiation Health Committee (2002):

> *The previous Standards Australia-coordinated process had failed to reach consensus, and a number of aspects of the RF area were still controversial. In particular, the issue of whether there are health effects from low levels of RF (too low to cause effects by heating) would need to be examined in the Standard publication.*

12. The "*oversights*" in TR182 as discussed in paragraph 29 herein, is a testament to the failure of the process. We further contend that to consider WHS is not an oversight as the Minutes of the Radiation Health Committee (2002) identify:

[2] https://www.standards.org.au/standards-development/developing-standards

Mr McKenna also queried where this standard would sit in relation to NOHSC/Worksafe standards. Dr Roy noted that MOU's were being developed with both Standards Australia and NOHSC to clarify ARPANSA's role.

13. The ARPANSA Standard has not been prepared in accordance with internationally accepted criteria for Standard Development and its independence, credibility and validity is highly questionably, as discussed later regarding conflicts.

A STANDARD OR A GUIDELINE?

14. What ECSFR have demonstrated above, is that the ARPANSA Standard, is not and cannot be considered an Australian Standard.

15. ECSFR assert that under the provisions in the ARPANS Act, the regulatory limitations imposed by the Constitution of Australia, and the development process followed, the Standard is in fact, and can only be considered to be <u>an unenforceable guideline</u>.

16. ICNIRP's Guidelines (considered to be IBP by ARPANSA and the document on which ARPANSA rely), have not been prepared following the principles of: *Openness and transparency, Consensus and Balance of representation.* We note that ICNIRP do not use the word 'Standard', but intentionally use the word 'Guideline'.

17. ECSFR assert that ARPANSA (and related regulatory agencies) may well be conspiring to engage in misleading and deceptive conduct by creating the perception that the ARPANSA guideline is an enforceable Australian Standard.

18. A Standard may be adopted as a regulatory instrument and is enforceable, a guideline is not enforceable.

19. Only State and Territory Health Ministries (and departments of the environment), have the power to adopt as a regulatory instrument and enforce the health provisions in The Standard.

20. ECSFR request that ARPANSA re-label the Standard as a Guideline as to not do so may be to mislead the public and public officials.

'GET OUT OF JAIL FREE' CARD?

21. There is a perception amongst the general public, and seemingly Departments of Education, Ministries of Health, workplaces and so on, that ARPANSA realise the

object of the ARPANS Act: "*The object of this Act is to protect the health and safety of people, and to protect the environment, from the harmful effects of radiation.*"

22. The stark reality is that Ministries of Health neither adopt, nor enforce the Standard (arguably negligent), and for all intents and purposes the realisation of the object of the Act is deferred to the wireless industry through ACMA endorsed self-regulation (noting ACMA have no regulatory jurisdiction over health in any event).

23. In addition to the ARPANSA Disclaimer (see above), ARPANSA have seemingly attempted to shift all liability to State Regulators, Workplaces, and Industry. Yet most (perhaps with the exception of industry) are entirely oblivious to their obligations which are clearly stated in the Foreword of The Standard as follows:

95 It is recognised that the Standard does not operate in isolation from the legal framework within Australia.
96 Relevant Australian occupational, health, safety, and environment laws provide obligation on employers,
97 and the designers, manufacturers and suppliers of plant or equipment, to ensure that their activities, or
98 their plant and equipment, do not represent a risk to the health and safety of their employees or third
99 parties who may be affected by them. In effect, such laws require relevant parties to continually assess and
100 improve the safety and health impact of their activities.

101 This Standard is intended to complement the requirements of the relevant Work Health and Safety
102 legislation in each jurisdiction. The relevant regulatory authority should be contacted should any conflict of
103 interpretation arise. A listing of such authorities is provided at www.arpansa.gov.au/Regulation/Regulators.

THE POTENTIAL COST TO THE STATE GOVERNMENTS

24. The effective enforcement of the Standard is a State responsibility.

25. The provision of healthcare, is also a State responsibility. It seems that the winners are the wireless industry and the sale of spectrum licenses to ACMA, and the losers in this exercise are the State Governments.

26. Has an assessment been undertaken on the cost to State healthcare systems from risk of harm being realised and the cost of monitoring and enforcement of Standard's compliance?

27. We note the Commonwealth impose the polluting infrastructure upon the States, and profit from the licenses, expect the State's to enforce the Standard and cover

any health-care costs if the Standard is proven to be ineffective, yet allow the States (e.g. Councils and local community) little if any say in Standard development, construction and operation of wireless telecommunications infrastructure?

WHERE IS THE TRANSPARENCY ON RISK?

28. A Standard exists as a regulatory instrument to fundamentally mitigate and manage risk.

29. The Australian Government adopts the international standard on risk management (ISO 31000). Fundamentally, agencies are tasked to identify risks to regulatory objectives. In the context of ARPANSA: *The object of this Act is to protect health and safety of people, and to protect the environment, from the harmful effects of radiation.*

30. The obvious questions, which we do not see addressed anywhere in the Standard's process are complex in terms of the variants of:

    a. What are the risks to the health of people (by category of person)?

    b. What are the risks to the safety of people (by category of person)?

    c. What are the risks to the environment (by flora and fauna categories)?

31. In conducting a risk assessment, one identifies the likelihood and consequence of risks being realised and pursues mitigating strategies to reduce either the likelihood or the consequence or both. One such strategy may be to adopt enforceable standards which can all be traced back to specific risks to the regulatory objective.

32. When considering private prosecutions for misfeasance or malfeasance in public office, our legal advice is that the object of the Act, the roles and duties of the employees under that Act, must be given consideration. We note that nowhere in the object of the ARPANS Act does it state "*to protect and maximise industry profit and intelligence gathering capability*", but rather "*…to protect health and safety of people, and to protect the environment, from the harmful effects of radiation."*

33. Independent research may be conducted to fill gaps in the understanding of likelihood and consequence to better assess risk.

34. By ARPANSA's own admission on its website: "*If there are any harmful effects, then it's likely that the longer the exposure to RF the greater any risk may be*."

35. ARPANSA admit: "*The general public are often unaware of exposure, may be continually exposed and cannot reasonably be expected to take precautions to minimise or avoid exposure.*"

36. ARPANSA further admit: *"Due to the lack of scientific evidence on mobile and cordless phone use by children, ARPANSA recommends that parents encourage their children to limit their exposure"*

37. An admission of continual exposure (without consent) and the increased risk of harm to health that presents, warrants precaution and a clear understanding of risks.

38. ARPANSA have quantified risk as "*small risk*" and "*some risk*", leaving a wide margin of the assessment of risk.

    a. As risk is a product of likelihood and consequence:

        i. Is the consequence an itchy eye (minor), or a life threatening seizure[3] or cancer or a cardiac arrest (major)?

        ii. Is the likelihood 1 in 10 (high) or 1 in 10,000 (low)?

    b. ARPANSA will appreciate that a "small risk" could be:

        i. A product of a high consequence and a low likelihood (e.g. 1 child in 10,000 dying of cardiac arrest at school), or

        ii. A product of a low consequence and a high likelihood (e.g. 1 child in 10 obtaining itchy eyes or a head-ache at school).

39. Think of the analogy of force-feeding peanuts to preschoolers every day as a part of the school curriculum. The population risk is low, the risk is foreseeable, and one child is bound to suffer harm. Peanuts are banned at school as not even one child is considered expendable or collateral damage.

40. Conspicuous by its absence is ARPANSA's lack of transparency on risk assessment. A 'one size fits all' approach to the levels in The Standard, is not considerate of different risk profiles of the population.

41. What if the government's forecast $500Billion cost to the economy from blood cancer alone, or the increase in many ailments (especially in children) are attributable to oxidative stress, inflammation and DNA damage are RF related? Is putting the entire population at risk worth the surveillance benefits to national security or shareholder profits? Only a genuine attempt to consider all the science (not just industry funded

[3] As occurred in Nambucca primary school recently after a wifi upgrade. Children and staff were Hospitalised.

science), and all the issues and the associated risks can answer that question. We should not be playing "Russian Roulette" with the Nation.

CONFLICTS OF INTEREST?

42. ICNIRP, as evidenced in recent ECSFR correspondence to ACMA[4], and ORSAA evidence to the Parliamentary Inquiry into 5G, is a conflicted organisation who's evidence has been ruled to be unreliable by the Court of Turin in Italy. ARPANSA consider ICNIRP to represent international best practice and seem to rely almost entirely on ICNIRP in the adoption of The Standard.

43. A member of ARPANSA is a board member of ICNIRP.

44. A researcher who's research (ACEBR) and evidence is heavily relied upon by ARPANSA and the Media, is the Chair of ICNIRP.

45. The former CMO is on the Board of the NHMRC that directs industry funding to ACEBR and is on the Board of the WHO, IARC.

46. Many members of the Australian Government, including those who participated in the recent Parliamentary Inquiry into 5G hold shares in the wireless industry. Some cannot recall if their family members also hold shares.

47. ECSFR have provided evidence (including based on documents obtained under FOI) to both the CMO and ACMA, that a reasonable person might interpret as demonstrating the Federal Department of Health develop national health policy advice based solely on industry strategy: Not medical or scientific advice.

48. A multi-Trillion dollar global industry with significant foreign financial backing, foreign manufacturing and media support will exert a sophisticated level of lobbying of elected officials that the general public cannot. Corporations partaking in the wireless industry (in some cases backed by foreign governments) also have the means to fund or influence mercenary science to subtly influence government policy and to capture regulatory agencies via ministerial oversight or other means.

49. Public servants have a personal responsibility, a Constitutional duty of care owned to the public to administer their duties under their governing legislation.

50. To this end, we implore ARPANSA to genuinely assess risk and to engage with all stakeholders in establishing an independent and informed Radiation Protection Standard and viable regulatory risk management framework for wireless technology. Such a framework must consider vulnerability, threat, likelihood, consequence and treatments and not accept evidence without a burden of proof placed on the claimant, and an understanding of who directs the funding and nature of research, and an understanding of who profits

[4] Attachment A of open letter to ACMA, dated 18.06.2020.

from decisions.

SPECIFIC COMMENTS

Section 1. Introduction

51. There is no box for the process or validity of the Standard, nor the relevance of risk or how this Standard operates as a regulatory instrument. On this basis, ECSFR, will be issuing an open letter to ARPANSA (which will be posted on our web site: www.ECSFR.com.au) to address these issues.

52. There has been no proper public debate on this issue. This draft has all been constructed behind closed doors without including the people who are going to be affected by the future increases in exposure into the discussion.

53. There have been no medical, health, or science experts independent of industry interests involved. This is not democracy. It advances a perception of control of the state by industry interests.

54. The draft is almost the same as the ICNIRP RF Guidelines. ICNIRP is an industry serving organisation, set up to create guidelines to protect its own interests rather than to protect the public.

55. With the latest pandemic we have seen how ignorance on health concerns can have a detrimental effect on economics. The evidence suggests that ARPANSA has not done its due diligence to act independently of industry and to consider health as a priority.

Section 2. Basic restrictions and reference levels for exposure to RF fields between 100 kHz and 300 GHz

56. We note that S2.1 of the Draft acknowledges a violation of the basic human rights to health and safety and of consent: "*The general public are often unaware of exposure, may be continually exposed and cannot reasonably be expected to take precautions to minimise or avoid exposure.*" For people who suffer from exposure to RF and do not consent, this statement can be taken as an admission of ARPANSA knowingly being a party to harming those people. Barrister Broomhall has presented legal arguments that this constitutes an assault. Not just on one person, but an entire population.

57. The draft does not appear to make provision for:

    a. Acceptable dosage, based on age, gender (c.f. alcohol) or medical condition.

    b. The greater environment. This is an object of the ARPANS Act and has been entirely overlooked. Only humans are considered for the purposes of the RF

standard, not plants, insects, birds and other animals (including pets). There are plenty of animal studies showing definite carcinogenic effect from RF on animals (e.g. lab rats).

c. The real world is one where people place the phone hard up against their ear or against their body (bra, or pants pocket). The notion of an air-gap in lab testing on a model that simulates approximately 2% of the population (e.g. S.A.M.) is fanciful.

d. Non-thermal effects, such as the many biological effects documented in the ORSAA database www.orsaa.org

e. Effects of continuous long-term exposures (longer than 30 minutes) on human health

f. Children as being more vulnerable – with thinner skulls and growing brains.

g. Young people as they are now in the category of high-end users (like those in the Interphone study who showed significant higher risk of glioma with 30 minute usage per day for longer than 10 years)

h. Signals that are being sent at 100kHz or less - which includes the signals carrying the information we are sending from our phones and tablets.

i. People who are affected by electromagnetic fields.

58. The draft does make provision for:

a. Industry to inflict greater levels of exposure to RF-EMR to the entire population, by adding more towers, more 5G masts, more Wi-Fi in schools and in the workplace, more devices incorporating wireless, driverless cars and buses, and the Internet of Things.

b. Industry to take less responsibility to Australians for the health effects of their infrastructure and signals.

c. The energy, waste, and environmental burden that the increased rollout will create

Section 3. Simultaneous exposure to multiple frequency fields

59. The industry is conveniently fixated on power densities and that there is no harm if tissue is not heated.

60. However, it is a known fact that (particularly with mm waves), the central nervous system (initially via skin receptors) can act as a conduit to the brain, stimulating the release of endogenous chemicals such as carbon monoxide or opioids.

61. Moreover, for decades weaponised frequencies have been researched (again well documented) that cause resonance or molecular disruption.

62. One must consider frequency (carrier waves and data transitions), perhaps phase and not only power density.

63. If the only tool one has is a hammer, then one treats every problem as if it were a nail. ARPANSA would be well aware how incredibly complex and electrosensitive biological systems are. I do not envy ARPANSA the difficult task it has before it, but the longest journey starts with one step, and that step must be to engage in the internationally recognised Standards setting process, involving all stakeholders.

Section 4. Verification of compliance with the basic restrictions and reference levels

64. Who audits the computer simulations and determines them to be accurate in terms of real-world readings?

65. Base stations are constantly adapting their output levels depending on the number of calls they are handling and how far away the handsets are from them. How can the computer simulations be remotely close to real-world conditions, when a real person living in a real street is exposed to different frequencies, time-varying power levels, and overlaps from different radiation sources (hot spots)?

66. ARPANSA do no real long-term background monitoring. Is is all based on calculations. We are not living in a computer simulation. The real complex world needs real measurements.

67. Industry (as a condition of emitting a polutant) should be required to have an EME monitor within real-world distances from every cell tower and small cell which records the actual level of emissions and reports it in real-time and then time-averages the level of exposure people near those monitoring stations are receiving. The information should be available to the general public. Carriers could use this data to adjust the power outputs of their radiation emissions sources in real time.

68. The public need to be able to access the information for their local towers:

    a. what frequency of signals are being sent and my whom

    b. the power levels of each

    c. records of what has changed,

    d. how the signals from all surrounding towers add together for each household

Section 5. Protection – occupational and general public exposure

69. Between wi-fi and cordless and cell phones, and small cells and base stations on or near workplaces, every worker in the country would be exposed to varying degrees in the workplace.

    a. This has been known about by ARPANSA since at least 2002.

    b. Why has there been no risk communications and how is this to be addressed?

70. How is it that ACEBR tell the Nation that harm from non-thermal levels or radiation is all in your head (nocebo), yet they have a WHS Policy warning of the hazards to health and safety from mobile phones. ARPANSA should quantify the issue of workplace risk, clarify 'nocebo' and advise that harm did not need to proven in the McDonald vs Comcare workers compensation case, so as not to obfuscate the risk.

71. There is little point in ARPANSA having advice, and keeping it a secret.

a. For example, we have asked ARPANSA previously (no direct response as is typical of ARPANSA) who in Government elected not to advise parents and schools of ARPANSA's recommendation that exposure for children be minised?

b. Who is responsible for risk communications?

c. Who is responsible for ensuring there will be OH&S guidelines in the workplace or the school?

d. Who is responsible for making the public/workers aware of a register of adverse health effects, making that register accessible (e.g. people who suffer greatly from radiation sickness are not going to log on with their i-phone to fill in a form)?

e. Who is responsible for notifying and training doctors on radiation sickness and the billable code IDC-10?

f. Who will inform workplaces that Lloyds excludes injuries from EMR exposure from its insurance products because of the impact it might have on the insurance industry. It is self-evident the impact would not be favourable. That is, the risk is foreseeable and likely inevitable because if realised it will impact the insurance industry unfavourably. If one is not able to obtain insurance for a 'thing', then the Cambridge Dictionary defines that as 'uninsurable'.

g. Who is responsible for notifying wireless industry shareholders that the consequence of the risk of harm to environment, health and safety is so high, that it is a material risk to the viability of the industry?

72. ARPANSA has failed to create a standard that provides precaution for Australians against the known harm and the future risk.

Please do not hesitate to correct us, if anything comment offered can be demonstrably proven false.

Sincerly,

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