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Senate Standing Committees on Economics,
PO Box 6100,
Parliament House,
Canberra ACT 2600

Dear Senators

Digital ID Bill 2023

Thank you for the opportunity to provide feedback on the Digital ID Bill 2023.

This Bill should be vigorously rejected because it would negatively impact Australians in many ways.

Among my concerns about the Bill are the following.

1. Concerns re use of digital technology

1.1 Freedom of choice about technology

The Bill would remove people's freedom of choice about what kinds of technology they use. Currently many people choose not to use digital devices that emit radiofrequency (RF) radiation.

The digital ID Bill would marginalise people who have made this choice.

It would require Australians to use wireless devices to access a wide range of functions and services. This would severely disadvantage people who do not or cannot use wireless devices, including those with electromagnetic hypersensitivity (see page 3).

People should not be required to use wireless devices in order to have equal rights with others and to function effectively in society.

1.2 Radiofrequency radiation

The Bill does not take into consideration the harmful effects of RF radiation.

Any increase in the use of digital devices will increase the amount of RF radiation to the user, to people nearby and to the community and environment from the mobile phone base stations that handle the increased data transmissions.

This radiation has been repeatedly demonstrated to have harmful effects on the body and on other living creatures.

- The International Agency for Research on Cancer has classified radiofrequency radiation as a Class 2B carcinogen. ⁱ
- Since that time, more evidence of carcinogenicity has been found from both human and animal studies.
- The International Classification of Diseases (ICD-10), a global standard for diagnostic health information for health practitioners, lists exposure to radiofrequency radiation as a classifiable condition.
- Many eminent scientists and doctors have expressed concerns about the effects of RF radiation on people and the environment. For example:
 - An ‘International Appeal’, signed by 248 scientists, states that ‘Numerous recent scientific publications have shown that EMF affects living organisms at levels well below most international and national guidelines. Effects include increased cancer risk, cellular stress, increase in harmful free radicals, genetic damages, structural and functional changes of the reproductive system, learning and memory deficits, neurological disorders, and negative impacts on general well-being in humans. Damage goes well beyond the human race, as there is growing evidence of harmful effects to both plant and animal life.’ ⁱⁱ
 - According to the 2020 Consensus Statement of UK and International Medical and Scientific Experts on Health Effects of Radiofrequency Radiation (RFR), ‘The main risks associated with exposure to such (wireless) non-ionising radiation in the peer-reviewed scientific literature include: increased cancer risk, cellular stress, increase in harmful free radicals, genetic damage, structural and functional changes of the reproductive system, learning and memory deficits, neurological disorders, and negative impacts on general well-being in humans.’ ⁱⁱⁱ
- Courts in different countries have made determinations recognising that RF radiation could be a health risk, even at exposure levels that complied with standards. ^{iv}
- Insurance companies have recognized the risks of RF radiation. ^v

Further, Australia’s radiation standard is based on flawed science and does not protect the public. International Commission on the Biological Effects of Electromagnetic Fields (ICBE-EMF has examined the relevant science and concluded that ‘Exposure limits for RF radiation

are based on numerous assumptions; however, research studies published over the past 25 years show that most of those assumptions are not supported by scientific evidence.’^{vi}

1.3 Electromagnetic hypersensitivity

The Bill would marginalise people with Electromagnetic Hypersensitivity (EHS). EHS is an allergic-type reaction to exposure to electromagnetic fields (EMFs), including RF radiation.

It results in symptoms of mild to extreme discomfort and impairment, including:

- headaches
- sleep problems
- fatigue
- tinnitus
- concentration and memory problems
- nausea and digestive problems
- skin redness and burning
- pain
- behaviour problems
- depression
- anxiety
- and irritability.

These symptoms are consistent with biological changes that scientists have shown to occur from exposure. These include:

- DNA damage
- changes to neurotransmitters and hormones, including a reduction in melatonin
- changes to cell behaviour, including increased levels of heat shock proteins and calcium ion efflux
- breaches of the blood-brain-barrier
- cell proliferation
- and oxidative stress.

In 28 years of working in this field, I have been contacted by many hundreds – at least – of people with EHS who are sensitive to low levels of exposure and they include:

- people unable to work in environments with wireless equipment;
- people unable to travel on public transport with WiFi;
- people unable to teach, work as teachers’ aids or learn in schools with WiFi;
- people unable to enter public buildings – libraries, government offices, businesses, retail outlets, medical facilities, entertainment venues and so on – with WiFi;
- people wrapping themselves in shielding material, shielding their homes, wearing shielded clothing etc in an effort to prevent symptoms from exposure;
- people moving homes to find less-exposed places for their families to live;
- people travelling Australia in search of low-radiation environments in which to feel comfortable.

These are not isolated scenarios. Many people are affected by exposure internationally and estimates of prevalence range from 1.5% to 13.3% of the population.^{vii}

The advent of 5G technology represents a new hazard for people with EHS. Not only will it increase the range of frequencies to which they are exposed, it will increase exposure levels in most urban and rural locations. Because different individuals respond to different frequency ranges, it is likely to increase the number of people experiencing symptoms.

1.4 5G and future generations of RF technology

The Bill does not take into account the effects of radiation from 5G and future generations of wireless technologies, which have not been demonstrated to be safe.

- 5G has not been fully rolled out and future generations not yet rolled out, so we don't know what their effects will be on the population.
- 5G utilises new technologies such as massive MIMO and beam steering and we don't know how they will affect exposed people, plants and animals.
- The higher-frequency millimetre waves of higher generations of technologies may be harmful as they are used in military weapons.
- These millimetre waves are of a size to resonate with the bodies of insects and are often thought to have harmful effects on insects, especially pollinators such as bees.
- Technologies are being developed, sold and rolled out without being able to demonstrate they are safe. They only have to comply with a standard that is based on flawed science and, therefore, not protective.

1.5 Other risks of digital technologies

Other problems that have been linked to the use of wireless devices include:

- addiction
- changes to brain structure (white and grey matter of brain)
- attention-deficit behaviours
- eyesight problems
- reduced interpersonal skills
- reduced empathy
- concentration and learning problems
- reduced fitness and obesity.^{viii}

1.6 Digital technology harms environment

The use of digital technology is having a harmful effect on the environment.

Digital technologies consume huge amounts of energy. According to Professor JR Cook, 'It requires more energy to power a smart phone (361 kW/h/year) than a refrigerator (322 kWh/year)' and some digital devices use even more power when they're on standby mode. Cook says, 'the explosion in energy use is not caused by people in developing nations getting automobiles ..., but rather by digital devices in the developed and developing world.'^{ix}

Digital technologies are responsible for enormous quantities of electronic waste.

- In 2019, a record 53.6 million tonnes of e-waste was generated. Most was incinerated or sent to landfill, with only 17.4 percent being recycled. This waste includes toxic metals and precious metals. ^x
- A United Nations report found that ‘‘Devices lead to a surplus of e-waste. Extending the lifespan of all smartphones in the European Union by a year would be equivalent to taking over 1,000,000 cars off the road in terms of carbon emissions.’ ^{xi}

It would be hypocritical of the Government to increase dependence on digital devices while claiming an interest in protecting the environment.

1.7 Humanitarian concerns

Cobalt, used in the manufacture of digital devices, is mined in appalling conditions by children as young as six. Professor Siddharth Kara, who visited the mines, wrote, ‘In mine after mine, I witnessed heartrending suffering at the bottom of global cobalt supply chains.’ ^{xii}

2. Other concerns

2.1 Need not demonstrated

The government has failed to demonstrate a need for a Digital ID system in Australia. Australians cannot be expected to take the government’s word that there is a need for it at face value.

It is clear that Australians do not need biometric scanning and other changes proposed by this bill to function effectively in society. Indeed, the changes are likely to marginalise more people than they will benefit.

There can be no justification for introducing an expensive, unnecessary system, especially in light of the wide range of negative impacts it would have on our lives.

2.2 Security risk

The Bill enables the Government to store vast amounts of private personal data that is vulnerable to hacking. Assurances that this data would be safe cannot be relied on because Australian Government data has been repeatedly hacked. In the last few months, at least 12 million Australian have had their data hacked. ^{xiii} Senator Malcolm Roberts says that recent examples of Government data hacking include:

- hacking of myGov data
- hacking of Australian Defence Force information (June 23)
- hacking of NDIS information (July 23)
- hacking of Department of Home Affairs data (July 23)

- hacking of Department of Veterans' Affairs (August 23)
- hacking of Australian Federal Police (September 23).^{xiv}

Further, the Bill allows the government to give personal information to third parties without being able to guarantee its security. This is a serious privacy concern for Australians.

2.3 Compulsory

Claims that the Digital ID Bill will be voluntary are not necessarily true because Section 74(4) of the Digital ID Bill specifies that the legislation will be made compulsory if a bureaucrat is "satisfied it is appropriate to do so".

Further, it is a concern that the Bill includes no provision for Australians to opt out of the legislation.

Another concern is that the Bill states that penalties will be imposed for failing to comply with the legislation.

2.4 Disruptions

A Digital ID system that requires people to use digital devices to access basic services will fail where there are technological faults and natural disasters.

We have already seen the havoc caused by telecommunications failures. For example, the Australia-wide Optus outage of 7 November this year impacted approximately 20 million customers, 400,000 businesses and government, health and transport systems.^{xv}

Similarly, New Zealand's telecommunications networks broke down in March this year during Cyclone Gabrielle.^{xvi}

We need to be wary about making society dependent on a technology that can so easily fail.

2.5 Freedom and rights

The collection of personal data, including biometric data, using facial recognition technology and similar, is extremely intrusive, invasive and unnecessary. This should not be a requirement for participating in our society.

The Bill and technology to support it would lead to numerous aspects of citizens' lives being captured and potentially monitored. A digital ID system such as that proposed in this Bill is a precursor to a social credit system, where citizens are penalised (unable to withdraw money from bank accounts, obtain loans, access medical care) unless they comply with a current or future Government directive.

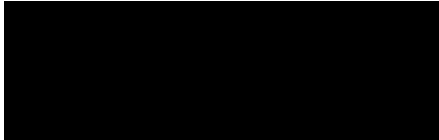
A report by the Center for Human Rights and Global Justice found that Digital ID systems have restricted human rights. '... digital ID systems can lead to a wide range of urgent human rights issues, including but not limited to: the violation of the right to nationality, limiting access to health care, food, and social security; a multitude of concerns about privacy and data protection, surveillance, and cybersecurity; and fundamental changes to models of democracy, participation, and citizen-state relationships. The human rights consequences can be severe and irreversible.'^{xvii}

Australians do not need a Digital ID Bill, nor the problems it would cause.

I urge you to consider the potential damage that this Bill could create and to wholeheartedly reject it.

Thank you for your attention to these issues and I look forward to your response.

Yours faithfully



Lyn McLean
Director

ⁱ IARC, ‘Non-ionizing Radiation, Part 2: Radiofrequency Electromagnetic Fields’, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Volume 102, 201, <https://publications.iarc.fr/Book-And-Report-Series/Iarc-Monographs-On-The-Identification-Of-Carcinogenic-Hazards-To-Humans/Non-ionizing-Radiation-Part-2-Radiofrequency-Electromagnetic-Fields-2013>

ⁱⁱ International Appeal, <https://emfscientist.org/index.php/emf-scientist-appeal>

ⁱⁱⁱ ‘2020 Consensus Statement of UK and International Medical and Scientific Experts on Health Effects of Radiofrequency Radiation (RFR)’

^{iv} McLean, Lyn, ‘Wireless-wise Families’, Scribe 2017

^v Ibid

^{vi} International Commission on the Biological Effects of Electromagnetic Fields (ICBE-EMF). Scientific evidence invalidates health assumptions underlying the FCC and ICNIRP exposure limit determinations for radiofrequency radiation: implications for 5G. Environ Health 21, 92 (2022). <https://doi.org/10.1186/s12940...>

vii Lena Hedendahl, Michael Carlberg, Lennart Hardell, 'Electromagnetic hypersensitivity--an increasing challenge to the medical profession', *Rev Environ Health*, 2015;30(4):209-15, doi: 10.1515/reveh-2015-0012.

viii McLean, Lyn, op cit

ix Professor J.R. Cook, 'Death by Technology: The Road to Hell is Paved with Good Inventions', Jefferson (North Carolina, USA) (McFarland & Company, Publishers), 2021).

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xii Professor Siddharth Kara, 'Is your phone tainted by the misery of the 35,000 children in Congo's mines?', *The Guardian*, 12.10.2018

xiii ABC News, 'Cyber black market selling hacked ATO and MyGov logins shows Medibank and Optus only tip of iceberg', *Cyber black market selling hacked ATO and MyGov logins shows Medibank and Optus only tip of iceberg - ABC News*

xiv Senator Malcolm Roberts, 'Tough Questions asked on Digital ID Bill',
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xv ABC News, 'What caused Optus's nationwide outage, and how long was it down for? Here's what we know', *What caused Optus's nationwide outage, and how long was it down for? Here's what we know - ABC News*

xvi Why NZ's communications networks broke down in Cyclone Gabrielle | RNZ News

xvii Center for Human rights and Global Justice, NYU School of Law, 'Paving a Digital Road to Hell?' *Report_Paving-a-Digital-Road-to-Hell.pdf* (chrgj.org)