## ACRONYMS AND GLOSSARY

1G	First generation of mobile phones; analogue voice systems
2G	Second generation of mobile phones; use digital technology
3G	Third generation of mobile phones; designed to mix data and voice communications
ACA	Australian Communications Authority
ACIF	Australian Communications Industry Forum
ALARA	As Low As Reasonably Achievable
AMPS	Advanced mobile phone system (analogue)
AMTA	Australian Mobile Telecommunications Association
ANSI	American National Standards Institute
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
CDMA	Code Division Multiple Access
CEMEPHI	Committee on Electromagnetic Energy Public Health Issues
CRADA	Cooperative Research and Development Agreement
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CTIA	Cellular Telephone Industry Association (USA)
CTN	Consumers' Telecommunications Network
DCITA	Department of Communications, Information Technology and the Arts (Commonwealth)
<i>Eμ-pim-1</i> mice	A strain of genetically modified mice engineered to be susceptible to a particular type of cancer
ECG	Electrocardiogram
ECTA	Electrical Compliance Testing Association
EEG	Electroencephalogram
EHS	Electro-hypersensitivity

ELF	Extremely Low Frequency
EM	Electromagnetic
EME	Electromagnetic emissions
EMF	Electromagnetic fields
EMI	Electromagnetic interference
EMR	Electromagnetic radiation
Epidemiology	the study of the various factors influencing the occurrence, distribution, prevention, and control of disease, injury, and other health-related events in a defined human population.
FDA	Food and Drug Administration (USA)
Frequency	The number of complete cycles of an electromagnetic wave in a second. Unit: hertz, abbreviation: Hz. 1 Hz = 1 cycle per second
GMA	Geomagnetic activity
GSM	Global System for Mobile Communication
Hertz	1 hertz (1 Hz) is one cycle per second of a wavelength;
	1000 Hz = 1 kilohertz (1 kHz); 1000 kHz = 1 megahertz (1MHz); 1000 MHz = 1 gigahertz (1 GHz).
IAEA	International Atomic Energy Agency
IARC	International Agency for Research on Cancer
ICNIRP	International Commission on Non-Ionizing Radiation Protection
ICRP	International Commission on Radiological Protection
IEEE	Institute of Electrical and Electronics Engineers
IEGMP	Independent Expert Group on Mobile Phones (UK) (authors of the Stewart Report)
INIRC	International Non-ionizing Radiation Committee
in vitro	in glass
in vivo	in a living body, as opposed to in vitro

IRPA	International Radiation Protection Association
mG	milliGauss (old unit of measurement of magnetic fields)
Microwatt	A unit of power equal to one millionth $(10^{-6})$ of a watt (abbreviation: $\mu$ W)
Milliwatt	A unit of power equal to one thousandth $(10^{-3})$ of a watt (abbreviation mW)
MOU	Memorandum of Understanding
NATA	National Association of Testing Authorities
NCI	National Cancer Institute (USA)
NHMRC	National Health and Medical Research Council
NIR	non-ionizing radiation
NRPB	National Radiological Protection Board (UK)
ODC	ornithine decarboxylase – an enzyme
power density	The measure of the radiated power of radiofrequency radiation reaching a surface. Sometimes called "power flux". The most common unit for this parameter is milliwatts per square centimetre (mW/cm <sup>2</sup> ). Also common is watts per square metre (W/m <sup>2</sup> ), where 1 W/m <sup>2</sup> = 0.1 mW/cm <sup>2</sup> = 100 $\mu$ W/cm <sup>2</sup>
power flux density	The rate of flow of radiofrequency energy per unit surface area expressed in watts per square metre (W/m <sup>2</sup> ) The basic dosimetric quantity for RF fields above 10 GHz is the intensity of the field measured as power density in watts per square metre (W/m <sup>2</sup> ) or for weak fields in milliwatts per square metre (mW/m <sup>2</sup> ) or microwatts per square metre ( $\mu$ W/m <sup>2</sup> ).
RF	Radiofrequency
SAR	Specific absorption rate
SRDC	Strategic Research and Development Committee – an NHMRC Committee
SW	Short wave
TDMA	Time Division Multiple Access

xiv	

TE/7	Standards Australia technical committee responsible for setting standards for human exposure to electromagnetic radiation
Tesla	Magnetic fields are measured in tesla (T), millitesla (mT) or microtesla ( $\mu$ T). In some countries the old unit called the Gauss (1 G = 100 $\mu$ T, or 1 $\mu$ T = 10 mG) is still used for measuring magnetic fields
TIO	Telecommunications Industry Ombudsman
W/kg	Watt per kilogram (measurement of Specific Absorption Rate)
WAP	Wireless Application Protocol
Watt	A measure of power (that is, energy per unit time) eg: 1 Watt = 1 Joule/second
WLL	Wireless Local Loop
WHO	World Health Organization
WTR	Wireless Technology Research (operation of the CTIA)