

Code of Professional Standards and Ethics in Science, Technology, and the Humanities – Version for second stage consultation 24 July 2018

Part 1: Preliminary Provisions

1.1 Introduction

1. The object of Royal Society of New Zealand (hereinafter Royal Society Te Apārangi) is “the advancement and promotion in Aotearoa New Zealand of science, technology, and the humanities”. For that purpose, the Society is required by its Act to establish and administer for Members of the Society a Code of Professional Standards and Ethics in Science, Technology, and the Humanities (the Code).
2. For the Society to support its Members to achieve the objectives of both the highest ideals of ethical behaviour, and world class research and scholarly practices, a robust code of practice is required. This Code applies across all fields of science, technology and the humanities, and across differing knowledge systems and research epistemologies, so as to address the complexity of ethical and practice concerns that may arise in Members’ work. This Code also functions to support public trust through transparent standards.
3. The Code is divided into parts. Part 2 sets out ethical values and principles that underpin relevant research epistemologies, and from those values and principles sets out a general framework describing the responsibilities of Members within the context of Aotearoa New Zealand. In Part 3, the framework is interpreted as a set of general standards, each supported by one or more specific standards.
4. The Code gives effect to The Treaty of Waitangi through a foundation of bi-cultural ethical principles of partnership, protection and participation from which the standards of the Code have been developed.
5. It is in the public interest¹ that all scientists, technologists, and humanities scholars act ethically, professionally and seek to prevent harm². Thus, Royal Society Te Apārangi encourages all researchers and scholars, research institutions, research funding agencies and any other stakeholders in research or scholarly activity to adopt or be guided by the Code.

1.2 Legal status of the Code

1. This Code of Professional Standards and Ethics in Science, Technology, and the Humanities is made pursuant to section 34 of Royal Society of New Zealand Act 1997.
2. This Code replaces all previous codes of professional standards and ethics issued by the Council of Royal Society Te Apārangi.

¹ The interests of people generally, including communities, whanau, hapū and iwi.

² Harm includes cultural harm, defined as conduct that results in, or contributes to, the breakdown of the spiritual, moral, physical and emotional wellbeing of indigenous peoples or Members of other groups sharing an ethnicity or cultural identity, and includes racist conduct. (model: caid.ca/ILD2002v5n17p4.pdf). Harm can only be justified if the potential benefits sufficiently outweigh any residual harm remaining after all reasonable avoidance and mitigation actions have been taken.

1.3 Compliance with the Code

1. Members³ of Royal Society Te Apārangi are obliged to comply with Part 3 of this Code when undertaking their research, scholarly or professional activities (hereinafter “activities”)⁴.
2. In a circumstance not covered by one or more specific standards, Members are obliged to interpret the relevant general standard(s) for the circumstance.
3. In order to comply with Part 3 it shall be sufficient for a Member to take the actions and to exercise the level of care that would reasonably be expected of an ethical, professional researcher or scholar in the same circumstances⁵.
4. Members are also required to meet their regulatory and legal obligations⁶ in order to comply with this Code.
5. The Code does not otherwise limit Members’ rights to exercise freedom of expression and freedom of enquiry under the Bill of Rights Act 1990, or to exercise the role of critic and conscience of society under s162 of the Education Act 1989.

Part 2: Values, Principles and Responsibilities

2.1 Values and Principles

Within the context of Aotearoa New Zealand, the ethical and professional values and principles relevant to, and responsibilities on, those who conduct research or scholarly activities are interpreted within a general framework which recognises human and civil rights, the principles of free enquiry and an open society, and the obligations of partnership, participation and protection arising from the Treaty of Waitangi. These principles and values represent the ethical sources of both the responsibilities as well as the detailed and specific standards that follow. They share a common ground: a respectful and rights-based knowledge discovery between researchers, participants and communities to advance science, technology, and the humanities in Aotearoa New Zealand. The Code prioritises neither the established research ethics principles nor the Māori values, and encourages Members to regard them as working together to guide action appropriate to their specific research context.

*Tika*⁷

³ Members include Honorary Fellows, Fellows, Professional Members, Associate Members, Student Members, Regional Constituent Organisations (Branches) and Constituent Organisations, but do not include Affiliate Organisations or Friends of the Society. Membership of a Regional Constituent Organisation or a Constituent Organisation of itself does not make a person a member of the Society.

⁴ Research, scholarly and professional activities include, but are not limited to activities in employment, consulting, contracting and in voluntary roles.

⁵ Circumstances includes consideration of the type of Membership held

⁶ Relevant legislation includes but is not limited to: the New Zealand Bill of Rights 1990; the New Zealand Public Health and Disability Act 2000; the Health and Disability Commissioner (Code of Health and Disability Consumers’ Rights) Regulations 1996 (www.hdc.org.nz); the Privacy Act 1993; the Health Information Privacy Code 1994; the Injury Prevention, Rehabilitation and Compensation Act 2001; the Resource Management Act 1991; the Hazardous Substances and New Organisms Act 1996; the Animal Welfare Act 1999; the Health Research Council Act 1990, and the Protection of Personal and Property Rights Act 1988.

⁷ Māori words have meanings that are highly context-dependent. In this context tika means acting with integrity and respecting the interests of relevant communities; mana means balancing one’s own authority and the rights held by others; whakapapa acknowledges the importance of relationships with relevant communities; manaakitanga means acting with care and respecting diverse values and communities; pūkenga means acting with rigour; and kaitiakitanga means acting with responsibility and ensuring environmental resources are managed appropriately.

Mana

Whakapapa

Manaakitanga

Pūkenga

Kaitiakitanga

Justice

Duty of care

Beneficence

Non-maleficence

Respect

Integrity

Guardianship

2.2 Responsibilities

The values and principles of this Code create a context from which Members' responsibilities are set out in this section. These responsibilities are then interpreted in Section 3 as a set of general standards, with each such general standard further interpreted by explicit, specific standards. Responsibilities:

1. ***For managing one's own behaviour:*** Members are responsible for ensuring that they behave at all times with professionalism and integrity, for exercising a duty of care, respecting others, acting with cultural intelligence⁸ and intellectual rigour (pūkenga), not acting with malice or prejudice, ensuring their competence is not mis-represented, and for observing accepted standards and codes of practice.
2. ***To support the public interest:*** Members should act responsibly taking reasonable care and respecting diverse values and communities (manaakitanga), making the results and findings of their activities available as soon as it is appropriate to do so, and ensuring their activities do not create an unacceptable level of risk of adverse consequences for the public interest.
3. ***To communities affected by the activity:*** Members are responsible for recognising in what ways their activities might affect communities including their intergenerational interests, for endeavouring to engage with those affected communities (whakapapa), for recognising their rights (mana) and respecting their interests (tika).
4. ***To partners and participants in the activity:*** Members are responsible for ensuring their activities intend to be beneficial to their partners and participants in the activities, for managing collected data responsibly, recognising mana, and for ensuring that all reasonable actions and precautions are taken to prevent harm to participants and protect vulnerable people.
5. ***To colleagues:*** Members have a responsibility to their colleagues to exemplify, require and support respectful and professional conduct.

⁸ Cultural intelligence means the capability to relate and work effectively across cultures.

6. ***For sustainability and guardianship of the environment:*** Members are responsible for acting responsibly, taking reasonable precautions to prevent their activities leading to significant, irreversible damage to the environment, and where applicable contributing to improved sustainability (kaitiakitanga).

Part 3: General and specific standards

3.1 Honesty, integrity and professionalism

1. Members are obliged to behave with honesty, integrity and professionalism when undertaking their activities.
2. Consistent with clause 3.1(1), Members are obliged to—
 - a. honestly represent their research goals and intentions; and
 - b. present the results of their research without falsification (including by deliberate omission) or conscious bias; and
 - c. fairly represent and not suppress the intellectual, material and practical contributions of others to their work and results; and
 - d. take ongoing responsibility for the contents of publications and reports authored by them; and
 - e. not destroy research records in order to prevent examination by bona fide critics; not falsify qualifications or knowingly make untrue claims of their own or others' experience; and
 - f. not commit plagiarism, or assist or condone acts of plagiarism by others; and
 - g. not harass⁹ or knowingly act with malice or prejudice towards individuals or groups of people on the basis of their gender, culture, ethnicity or beliefs; and
 - h. be fair and unbiased in their activities, in the application and communication of their knowledge, and in developing their professional view; and
 - i. make evident those statements that are speculative or interpretive, and avoid undue simplification, in their reports or expressions of their professional view; and
 - j. avoid and oppose any selective manipulation or presentation of results to meet the perceived needs or requirements of employers, clients, funding agencies, the media or other interested parties; and
 - k. avoid or declare real or potential conflicts of interest, and where appropriate record them; and
 - l. not accept any inappropriate inducement, including receiving in their own right anything of substantial value from any third party, or giving or promising to give anything of such value to any third party, where doing so might compromise or might reasonably be seen to compromise the integrity of their, or that other party's, research or other activity; and

⁹ Harassment is conduct that unjustifiably disturbs or upsets another. It is characteristically repetitive and may be physically or psychologically harmful to the victim. It is exacerbated when the consequences of not accepting the behaviour may be disadvantageous to the victim.

- m. recognise their obligation to uphold ethical and professional standards across the research community including raising concerns about adherence to applicable standards with the researchers involved or on matters of sufficient gravity, reporting their concerns about suspected misconduct, substandard or irresponsible research practices to the relevant authorities.

3.2 Competence and good practice

1. Members are obliged to only claim competence commensurate with their expertise, knowledge and skills, apply practices which meet the relevant national, Māori¹⁰ and international standards and codes of practice in their discipline or field, and inform their employer, client or funder of their obligations under this Code and any other ethical code to which they are bound.
2. Consistent with clause 3.2(1), Members are obliged to—
 - a. not present themselves as competent outside their relevant areas of expertise, knowledge or skills; and
 - b. maintain the currency of their relevant knowledge and skills in any area in which they claim to be competent; and
 - c. observe the requirements of any relevant national, Māori or international codes of practice or standards relevant to their activities¹¹; and
 - d. act with cultural intelligence and intellectual rigour in their activities; and
 - e. ensure that activities they undertake in other jurisdictions conforms to both the ethical standards pertaining in Aotearoa New Zealand and those of the jurisdiction in which the activities are undertaken; and
 - f. report to their employer, funder or client as appropriate when there are insufficient resources to undertake their activities in accordance with the relevant standard or code of practice.

3.3 Duty of care

1. Members are obliged to undertake their activities diligently and carefully.
2. Consistent with clause 3.3(1), Members are obliged to—
 - a. ensure that their proposed research or scholarly methodologies are fit for purpose; and
 - b. be diligent and careful in their activities to ensure that their methodologies are proficiently applied and undertake sufficient checking to minimise undetected mistakes or errors; and
 - c. accept responsibility, including for rectification where practicable, if mistakes, errors or poor practice are discovered in their activities or results, or in the activities or results of those whose activities they have supervised; and

¹⁰ As set out, for example, in Te Ara Tika Guidelines for Maori Research Ethics.

¹¹ e.g. within Aotearoa New Zealand, the New Zealand Psychological Society, the Association of Social Science Researchers, the New Zealand Association for Research in Education, Engineering New Zealand.

- d. take reasonable steps¹² to guard against unconscious bias and protect others from harm (including cultural harm) during the course of their activities.

3.4 Responsibilities in the public interest

1. Members are obliged to support the public interest by making the results and findings of their activities available as soon as it is appropriate to do so, by presenting those results and findings in an honest, straightforward and unbiased manner, and by being prepared to contribute their knowledge or skills to avert or lessen public crises¹³ when it is appropriate to do so.
2. Consistent with clause 3.4(1), Members are obliged to—
 - a. encourage employers, funders and clients to permit public disclosure of the results of their activities unless there are legitimate and lawful reasons for confidentiality but, nevertheless, always ensure that confidentiality is maintained when it is legitimately required by the employer, funder or client; and
 - b. within the caveat of a., ensure the communication of the results of publicly-funded research at the earliest appropriate opportunity; and
 - c. seek relief or exemption from, or reconsideration of, contractual conditions that apply to their activities imposed by an employer, funder or client, if they consider that there is an unacceptable risk of adverse consequences for the public interest arising from continuation of conditions that limit public disclosure; and
 - d. not knowingly suppress negative research results, and endeavour to publish and/or notify affected parties of any negative results or results that may not support present theories or interpretations of previous results; and
 - e. support the publication and dissemination of all competent research even when the conclusions drawn by the authors are contrary to the member's own opinions or to the currently accepted consensus; and
 - e. strive to ensure that all public statements derived from their activities are accurate, especially in communicating the potential impacts of the research; and
 - f. where reasonably practicable, be prepared to contribute in a public crisis, if either the risks or consequences can be substantially reduced or averted by application of their expertise, knowledge and skills.

3.5 Responsibilities to partners, participating and affected communities¹⁴

1. Members are obliged, in undertaking their activities, to both endeavour to partner with those communities and mana whenua for whom there are reasonably foreseeable direct impacts, and meet their obligations under the Treaty of Waitangi.
2. Consistent with clause 3.5(1), Members are obliged to—

¹² In this context “reasonable steps” does not include suppressing research findings that may challenge the activities, views or beliefs of groups of people.

¹³ In this context, public crisis means a situation in which there is an unacceptable risk of significant harm to people, or of substantial and widespread damage to property or the environment.

¹⁴ For the purpose of Section 3.4, an “affected community” is an identifiable community for which there are reasonably foreseeable direct impacts, and which has sufficient internal organisation, identified leadership and willingness to make engagement at a community level practicable.

- a. endeavour to identify potentially affected communities, hapū or iwi prior to commencement of the activity; and
- b. where practicable, involve the affected community, hapū or iwi in the development of the aims, design of the activity and the selection of means for its execution; and
- c. endeavour to both involve affected communities, hapū and iwi as partners in the activity and respect their rights and cultural practices; and
- d. recognise and respect any established community, hapū or iwi rights and interests in intellectual property, mātauranga¹⁵, or of materials, samples, data or information gathered during or developed during the research including obtaining necessary permissions to use existing mātauranga and giving effect to any established right to community, hapū or iwi ownership of new knowledge created during the activity; and
- e. endeavour to share those results and findings that are specific to the affected community, hapū or iwi with them in advance of publishing or otherwise communicating the results and findings to others; and

3.6 Responsibilities to participating people

1. Members are obliged to promote and safeguard the health, safety, well-being and rights of people involved in or affected by their activities.
2. Consistent with clause 3.6(1), Members are obliged to—
 - a. Assess and minimise foreseeable hazards and safeguard the safety and health of people involved in, or likely to be affected by their activities; and
 - b. only involve people as participants in any proposed activity if the potential benefits sufficiently outweigh the risk of harm to those participants; and
 - c. design and perform their activities according to an accepted research protocol which conforms to widely applied good practice in their discipline, and which describes how the following ethical principles for human participants have been addressed:
 1. disclosure of research aims:
 2. respect for personal autonomy by informed and voluntary consent:
 3. respect for the rights of privacy and confidentiality:
 4. respect for the vulnerability of some participants:
 5. minimisation of harm, including cultural harm:
 6. avoidance of conflicts of interest:

¹⁵ Mātauranga Māori is the intellectual capital generated by whānau, hapū and iwi over multiple generations. It is a shared-community knowledge that is embedded in lived experience and carried in stories, song, place names, dance, ceremonies, genealogies, memories, visions, prophesies, teachings and original instructions, as and learnt through observation and copying of other community Members. It is a holistic system of orally passed knowledge, concepts, beliefs and practice. Mātauranga Māori, mātauranga ā-iwi, mātauranga ā-hapū, and mātauranga ā-whānau are dynamic, innovative, and generative systems of knowledge.

7. respect for established property rights including intellectual, material, financial and cultural:
 8. social and cultural responsibility; and
- d. obtain approval of the proposed protocol for involving human participants from an accredited committee that assesses proposals against widely accepted codes of good practice¹⁶; or have quality assurance of the protocol undertaken by a competent committee constituted for that purpose; and
 - e. disclose the research aims to participants, normally in advance of the research, but at a later time if, the committee in d., is satisfied that such disclosure would adversely affect either data quality or the validity of the research method; and
 - f. give highest priority to the welfare¹⁷ of participants, including ensuring that there are sufficient protections (including, where relevant, insurance) for participants who suffer injury or are harmed as a result of participation in research; and
 - g. disclose any vested interest in a trial to the body granting approval, and to participants; and
 - h. refer the matter to the appropriate authority should any unexpected ethical issue arise and, if necessary, be prepared to stop the research and not restart it until the authority's approval to do so has been obtained; and
 - i. avoid coercion; and fully inform potential participants of their rights to refuse participation without negative consequences, and to withdraw from the research at any time; and
 - j. ensure that any overseeing committee or authorised individual has access to trial data as they accumulate to assess the risk/benefit ratio and whether the trial should be discontinued because the re-evaluated ratio is no longer acceptable.

3.7 Responsibilities for the welfare of animal participants

1. Members are obliged to ensure that the three Rs (Replacement, Reduction and Refinement) are considered at all stages of their activities involving animals, minimise the impacts on animals used in those activities and in so doing support the welfare and wellbeing of those animals.
2. Consistent with clause 3.7(1), Members are obliged to—
 - a. investigate possibilities for using alternatives and avoiding the use of animals at all; and
 - b. use the minimum number of animals required for scientific validity; and
 - c. design and perform their activities according to an accepted research protocol or code of conduct that meets the requirements of the Animal Welfare Act 1999¹⁸, conforms to widely applied good practice in their discipline, and addresses the following ethical principles for animals:
 1. undertaking a comprehensive review of previously published research to ensure there is a new and justifiable need to use animals; and

¹⁶ Information on approved ethics committees and guidelines on ethics in health research in Aotearoa New Zealand can be obtained from the Health Research Council of New Zealand (www.hrc.govt.nz).

¹⁷ Including their health, mental and cultural well-being.

¹⁸ Or any comparable successor legislation to the 1999 Act.

2. undertaking a comprehensive review of available research methodologies and animal handling practices to select the most effective research method and animal handling practices; and
 3. selecting the most appropriate animal species; and
 4. where practicable, endeavour to partner with Māori in activities involving as participants or likely to significantly affect taonga species¹⁹ or fauna indigenous to Aotearoa New Zealand; and
 5. minimising harm or distress which will be inflicted on any animal and ensuring any such harm is outweighed by the realistic benefits likely to accrue; and
 6. using appropriate and approved methods of anaesthesia, analgesia and tranquilisation on animals subjected to invasive procedures; and
 7. undertaking supervision of the animals to ensure they are fed and cared for to safeguard their health and comfort; and
 8. ensuring the competence of all persons handling animals or undertaking the research through adequate training and supervision; and
 9. ensuring the research is sufficiently well resourced so if an adverse or unforeseen event was to occur the welfare of the animals can be assured.
- d. obtain approval of the proposed protocol for using animals from an accredited committee that assesses proposals against widely accepted codes of good practice²⁰; or have a quality assurance of the protocol undertaken by a competent committee constituted for that purpose; and
 - e. disclose any vested interest in a trial to the body granting approval or undertaking quality assurance; and
 - f. refer the matter to the appropriate authority should any unexpected ethical issue arise and, if necessary, be prepared to stop the research and not restart it until the authority's approval to do so has been obtained; and
 - g. ensure that any overseeing committee or authorised individual has access to trial data as they accumulate to assess whether the trial should proceed or be discontinued; and
 - h. share their own experiences to assist other researchers give effect to the three Rs in their own activities; and
 - i. disseminate any negative results to prevent unnecessary use of animals for research of a similar purpose to that in which the negative results occurred.

¹⁹ Taonga species are species of particular cultural significance to Māori generally, an iwi or a hapū.

²⁰ Information on approved ethics committees and guidelines on ethics in research in Aotearoa New Zealand can be obtained from the [Animal Welfare Act 1999](#).

3.8 Responsibilities to manage data and samples²¹

1. Members are obliged to develop, and implement so far as they are reasonably able²², a management plan to ensure the integrity, retention, secure storage, appropriate use of data and samples gathered or developed during their activities.
2. Consistent with clause 3.8(1), in development and implementation of their management plan, Members are obliged to -
 - a. recognise differing types of data and samples including personal and community data, and identify situations where both individual and community permissions are required; and
 - b. recognise the mana that Māori, iwi and hapū have over data and samples collected from and about them, their communities, cultural knowledge and resources, including respecting any rights to ownership, governance and control of use of the data or samples; and
 - c. recognise and disclose the intellectual property that may exist in any data or samples, and ensure that the established rights of the intellectual property owner are recognised and observed; and
 - d. ensure that all conditions under which consent has been given, including any limitations on future use of the data and samples, are recorded and those records securely linked to the data or samples; and
 - e. ensure or require that all conditions of consent are complied with whenever the data and samples are accessed, used, collated, interpreted or presented; and
 - f. ensure that if data or samples collected for one restricted purpose are proposed to be used for another that any practicable steps are taken to extend existing consents or obtain new consents; and
 - g. ensure that all data and samples have clear labelling and annotations to enable their accurate interpretation by others; and
 - h. endeavour to safeguard the privacy of individuals when data sets are collated or aggregated with other data; and
 - i. ensure that samples of any newly discovered flora and fauna are lodged in recognised national collections²³ or with appropriate authorities.

3.9 Responsibilities to colleagues

1. Members are obliged to demonstrate and encourage ethical behaviour and high professional standards amongst their colleagues.
2. Consistent with clause 3.9(1), Members are obliged to—

²¹ In this context data and samples includes collated information, data that is collected or measured, samples or specimens of material collected for analysis, and results derived from analysis of raw data

²² This obligation expires when the Member is no longer able, in practical terms, to influence the ongoing management of the information, data, samples, materials or derived results gathered or developed during their activities, or when the data or samples are transferred to a recognised long term data or sample repository which assumes responsibility for their further management.

²³ For example, taxonomic collections held in museums, crown research institutes or universities.

- a. provide honest, unbiased comment in a respectful way to colleagues on the quality of their work or on their proposals, manuscripts and papers, and treat all information gained in such activity as privileged and confidential; and
- b. appropriately acknowledge and fairly record the intellectual, cultural, material and practical contributions of others to their work and results; and
- c. avoid falsely, vexatiously or maliciously impugning the reputations of colleagues or otherwise compromising or denigrating them in order to achieve commercial, professional or personal advantages; and
- d. ensure that those they supervise or guide comprehend both the need to further develop their own knowledge and skills and the behavioural norms of a professional researcher or scholar in the discipline or field.

3.10 Responsibilities for sustainability and guardianship of the environment

1. Members are obliged to recognise the need for the sustainable management²⁴ of resources and minimise any foreseeable adverse environmental impacts arising during or resulting from their activities.
2. Consistent with clause 3.10(1), in their activities Members are obliged to—
 - a. endeavour to utilise resources efficiently; and
 - b. minimise the generation of waste and, where applicable, encourage the environmentally sound re-use, recycling and disposal of waste; and
 - c. observe the principles and practices of sustainable management; and
 - d. identify and assess the impacts of their activities on the environment, and take steps to avoid or mitigate any adverse effects; and
 - e. inform decision makers, mana whenua and others likely to be affected of any environmental impacts of their activities, and engage such stakeholders in regard to any foreseeable consequences which may follow; and
 - f. not impair the ongoing conservation of unique or valued features, components and systems within the Aotearoa New Zealand natural environment; and
 - g. not impair the ongoing protection and conservation of artefacts, places or areas of cultural or historical significance; and
 - h. where practicable, endeavour to partner with Māori as kaitiaki in activities likely to significantly affect taonga species, or flora and fauna indigenous to Aotearoa New Zealand.

²⁴ Sustainable management is defined as meeting the needs of the present without compromising the ability of succeeding generations to meet the needs of the future.