

Code of Professional Standards and Ethics in Science, Technology, and the Humanities

Revised draft for consultation March 2018

Part 1: Preliminary Provisions

1.1 Introduction

1. The object of the Royal Society of New Zealand (hereinafter Royal Society Te Apārangi) is “the advancement and promotion in 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. The Code intends to exemplify the highest ideals of ethical practice by researchers and scholars within a Treaty of Waitangi partnership and multi-cultural community, as well as provide statements of the expectations that all people within Aotearoa New Zealand can have of Members of Royal Society Te Apārangi’s research and scholarly community.
3. Accordingly, it is divided into Parts. Part 2 sets out ethical values/principles that underpin relevant research epistemologies, and from those values/principles sets out a general framework describing the responsibilities of researchers 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 do no cultural harm². Thus, Royal Society Te Apārangi encourages all researchers and scholars, research institutions and research funding agencies to adopt the Code.
6. Royal Society Te Apārangi encourages all stakeholders in any research or scholarly activity to state their expectation that the activity will be carried out in accordance with the Code.
7. As this Code serves a wide range of individuals and organisations, and covers a diverse range of fields of research, knowledge systems, scholarly or professional activities, it is written in a general style.

1.2 Legal status of 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 the Society.

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

2 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).

1.3 Compliance with the Code

1. Members³ of Royal Society Te Apārangi must 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 must interpret the relevant general standard(s) for the circumstance.
3. It shall be sufficient compliance with this Code 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. The Code sets out requirements on Members that are above those set out in legislation and statutory regulations; Members are also required to meet their regulatory and legal obligations⁶ and their obligations under the Treaty of Waitangi in order to comply with this Code.
5. The Code should be read alongside the general desirability of recognising Members’ right to freedom of expression.

Part 2: Values/Principles and Responsibilities

2.1 Value/Principles

Within the context of Aotearoa New Zealand, the ethical and professional values/principles relevant to, and responsibilities on those who conduct research or scholarly activities are interpreted within a general framework which recognises obligations of partnership, participation and protection arising from the Treaty of Waitangi. These values/principles are:

Tika:	Doing what’s right for the research and the community;
Mana:	Respecting decision-making authorities;
Whakapapa:	Acknowledging relationships across communities;
Manaakitanga:	Showing respect for diverse values and communities;
Pukenga:	Acting with cultural and intellectual rigour;
Kaitiakitanga:	Maintaining a balance between rights and responsibilities;
Justice:	Fairness and doing of the right thing;
Duty of care:	Acting carefully and diligently in service to others;
Beneficence:	Doing good;
Non-maleficence:	Doing no harm;
Respect:	For people and their rights to self-determine;
Integrity:	Honesty and objectivity (including cultural integrity);
Guardianship:	Sustainability, conservation, avoiding irreversible damage.

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.

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 Code of Health and Disability Consumers’ Rights 1996; 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.

2.2 Responsibilities

1. **For managing one's own behaviour:** Researchers and scholars 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 and intellectual rigour (pukenga), not acting with malice or prejudice, ensuring their competence is not mis-represented, and for observing accepted standards and codes of practice.
2. **To partners and participants in the activity:** Researchers and scholars 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 avoid harm to participants.
3. **To communities affected by the activity:** Researchers and scholars are responsible for doing what's right for the community (tika), recognising when their activities might impact on communities and in such circumstances for partnering with those communities (whakapapa) and protecting their rights.
4. **To the public interest:** Researchers and scholars are responsible for showing respect for diverse values and communities, and ensuring their activities do not create an unacceptable level of risk of adverse consequences for the public interest.
5. **To colleagues:** Researchers and scholars have a responsibility to their colleagues to exemplify, require and support suitable conduct, including in enabling the principles of the Treaty of Waitangi.
6. **To employers, funders and clients:** Researchers and scholars have a responsibility to acknowledge relationships across communities, and respect the rights of employers, funders and clients.
7. **For sustainability and guardianship of the environment:** Researchers and scholars are responsible for maintaining a balance between rights and responsibilities (kaitiakitanga), for taking reasonable precautions to prevent their activities leading to significant, irreversible damage to the environment, and where applicable contributing to improved sustainability.

Part 3: General and specific standards

3.1 Honesty, integrity and professionalism

1. Members must behave with honesty, integrity and professionalism when undertaking their activities.
2. Consistent with clause 3.1(1) Members must –
 - 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 knowingly act with malice or prejudice towards others on the basis of their 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. endeavour to publish or otherwise notify to affected parties any negative results or results that may not support present theories or interpretations of previous results; and
- l. avoid or declare real or potential conflicts of interest, and where appropriate record them; and
- m. 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 fairly be seen to compromise the integrity of their, or that other party's, research or other activity; and
- n. 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 Duty of care

1. Members must undertake their activities diligently and carefully.
2. Consistent with clause 3.2(1), Members must –
 - 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 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
 - d. take all necessary steps to avoid inflicting harm (including cultural harm) on others during the course of their activities.

3.3 Competence and good practice

1. Members must only claim competence commensurate with their qualifications, knowledge and skills and must follow practices which conform to recognised national, Māori⁷ and international standards and codes of practice in their discipline or field.
2. Consistent with clause 3.3(1), Members must –
 - 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 nationally-recognised codes of practice or standards relevant to their activities⁸; and
 - d. ensure that activities they undertake in other countries conforms to the higher of the ethical standards pertaining in Aotearoa New Zealand or those of the jurisdiction in which the activities are undertaken.

⁷ As set out, for example, in Te Ara Tika Guidelines for Maori Research Ethics.

⁸ 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.

3.4 Responsibilities to partners, participating and affected communities

1. Members must, in undertaking their activities, 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 3.4(1), Members must –
 - a. Identify potentially affected communities, hapu or iwi and, prior to commencement, seek to engage them in the activity; and
 - b. ensure that affected communities, hapū and iwi are informed partners in the activity and that their wishes are respected; and
 - c. involve the community in the development of the aims and design of the activity and the means for its execution where that is reasonably achievable; and
 - d. recognise and respect any community, hapu or iwi rights and interests in intellectual property, mātauranga⁹, 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 right to community, hapu or iwi ownership of new knowledge created during the activity; and
 - e. share those results and findings that are specific to the affected community, hapu or iwi with them in advance of publishing or otherwise communicating the results and findings to others; and
 - f. additionally meet the requirements of section 3.5 should individual members of the community, hapu or iwi be direct participants in the research.

⁹ 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, prophecies, 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.

3.5 Responsibilities to participating people

1. Members must promote and safeguard the health, safety, well-being and rights of people involved in or affected by their activities.
2. Consistent with rules 3.5(1), Members must –
 - 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 it can be first established that there are sufficient potential benefits to outweigh the risk of harm to those participants.
 - 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. informed and voluntary consent:
 2. respect for the rights of privacy and confidentiality:
 3. respect for the vulnerability of some participants:
 4. minimisation of harm, including cultural harm:
 5. disclosure of research aims:
 6. avoidance of conflicts of interest
 7. respect for property rights including intellectual, material, financial and cultural:
 8. social and cultural responsibility.
 - d. obtain approval of the proposed protocol for involving human participants from an accredited committee that assesses proposals against widely accepted codes of good practice¹⁰; 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 welfare¹¹ 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 proceed or be discontinued.

¹⁰ 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).

¹¹ Including their health, mental and cultural well-being.

3.6 Responsibilities for the welfare of animal participants

1. Members must 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 3.6(1), Members must –
 - a. investigate possibilities for using alternatives and avoiding the use of animals at all; and
 - b. minimise the number of animals used, whilst ensuring the validity of results and conclusions is not put at risk through too small a sample size; 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, 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
 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. partnering with Māori in activities involving indigenous fauna; 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 tranquillisation 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 practice¹²; 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.

¹² Information on approved ethics committees and guidelines on ethics in research in Aotearoa New Zealand can be obtained from the Animal Welfare Act Health.

3.7 Responsibilities to manage data and samples¹³

1. Members must develop, and implement so far as they are reasonably able¹⁴, a data 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 3.7(1), in development and implementation of their data management plan Members must -
 - a. recognise differing types of data including personal and community data, and identify situations where both individual and community permissions are required; and
 - b. recognise the sovereignty of iwi/Māori over data collected from and about them, their communities, cultural knowledge and resources, including their rights to ownership, governance and control of use of the data; and
 - c. ensure that relevant consents have been obtained for all data over which they have control, ownership or custody; 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; 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 either the existing consents are extended, or new consents obtained through an appropriate quality assurance or permissions process; and
 - g. strive to ensure that any existing anonymity of people is preserved on an ongoing basis, including when data sets are collated or aggregated with other data; and
 - h. recognise and disclose the intellectual property that may exist in any data, and ensure that the rights of the intellectual property owner are recognised and observed; and
 - i. ensure that samples of any newly discovered natural flora and fauna are lodged in recognised national collections¹⁵ or with appropriate authorities; and
 - j. ensure that all data and samples have clear labelling and annotations to enable their accurate interpretation by others; and
 - k. retain relevant data and samples to enable checking of derived results and findings to be undertaken at a later time; and
 - l. ensure that any requirement to destroy data or samples at the end of a consented period, or upon data being superseded, is adequately documented, and complied with, including the destruction of any backup data copies.

13 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

14 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

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

3.8 Responsibilities in the public interest

1. Members must respect the public interest by making the results and findings of their activities available as reasonably possible, and present those results and findings in an honest, straightforward and unbiased manner.
2. Consistent with clause 3.8(1), Members must –
 - 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 earliest possible communication of the results of publicly-funded research; and
 - c. seek relief from, or reconsideration of contractual conditions that apply to their activities imposed by an employer, funder or client, if they consider that there is unacceptable risk of adverse consequences for the public interest arising from continuation of conditions that limit public disclosure; and
 - d. 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. be prepared to contribute if there is an unacceptable, immediate risk of significant adverse effects for the public interest, and such risk or effects can be substantially reduced or averted by application of their knowledge and skills.

3.9 Responsibilities to colleagues

1. Members must encourage ethical behaviour and high professional standards from their colleagues.
2. Consistent with clause 3.9(1), Members must –
 - a. provide honest, unbiased comment 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; and
 - e. act collegially to assist colleagues meet their responsibilities.

3.10 Responsibilities to employers, funders and clients of research

1. Members must respect the rights of employers, funders and clients.
2. Consistent with clause 3.10(1), Members must –
 - a. inform their employer, client or funder of their obligations under this Code and any other ethical code to which they are bound; and
 - b. comply with all conditions set out in any contractual arrangements pertinent to their activities; and
 - c. identify, disclose and respect any intellectual property rights employed within, or arising from activities undertaken for an employer, funder or client; and
 - d. identify, disclose and respect any cultural intellectual property rights pertinent to their activities; and
 - e. strive to efficiently deploy resources available to them; and
 - f. disclose 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.

3.11 Responsibilities for sustainability and guardianship of the environment

1. Members must recognise the need for the sustainable management¹⁶ of resources and minimise any foreseeable adverse environmental impacts arising during or resulting from their activities.
2. Consistent with clause 2.10(1), in their activities Members must –
 - a. ensure the efficient use of resources; 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. ensure their activities are not detrimental to the ongoing conservation of unique or valued features, components and systems within the Aotearoa New Zealand natural environment; and
 - g. ensure their activities are not detrimental to the ongoing protection and conservation of artefacts, places or areas of cultural or historical significance; and
 - h. partner with Māori in activities that may impact indigenous flora or fauna.

¹⁶ 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.