

Policy Enhancement Support Review - Tetiaroa Research Data Policy

Thank you for sharing your policy with us for the FAIRsFAIR policy support programme. Over the summer, the FAIRsFAIR team carried out a review of each policy against our set of policy enhancement recommendations¹. The review process involved characterising each policy against a set of defined policy elements. The policy elements were grouped under three categories which included:

- Context of the policy itself such as the title and the year the policy came into effect
- Content of the policy focusing on the suggested and required aspects of RDM and data sharing
- Support for adhering with the policy and compliance monitoring

At least two reviewers assessed each policy to provide a consensus view. In this short report, we provide a brief summary outlining our characterisation of your policy and offering some general recommendations for good practice.

¹ Davidson, Joy, Grootveld, Marjan, Whyte, Angus, Herterich, Patricia, Engelhardt, Claudia, Stoy, Lennart, & Proudman, Vanessa. (2020). D3.3 Policy Enhancement Recommendations (1.0). Zenodo. https://doi.org/10.5281/zenodo.5362183

Context of the Policy

This section characterised details about the context of the policies themselves such as the title, year of introduction and associated persistent identifiers.

Policy element	Review Finding	Good practice recommendation
Title	The policy has a clear and appropriate title	To support findability, policies should have a title that makes clear whose policy it is and what the policy relates to.
Year the policy was introduced	The policy does not make clear when it came into effect or provide a scheduled review date.	To support both human interpretation and machine actionability, the policy should make clear the period of validity, differentiating between the date it was written and the date it was implemented where necessary.
Persistent Identifier (PIDs)	The policy does not have a persistent identifier such as a DOI.	PIDs should be assigned to clearly versioned and registered policies to ensure that the right version can be found and fed into machine actionable pipelines. These PIDs should be included in the related metadata record for the policy in registries such as FAIRsharing.org or similar.
Machine readable	The policy is available in a machine readable format (e.g., HTML, PDF)	Policies should be described consistently using a structured data markup schema to support both human and machine readability.

General Comments:

At the time of review, the policy is in a draft/developmental stage; it should be straightforward to address the policy elements that are identified above as lacking in clarity (e.g., PID, implementation date, etc.) and implement the good practice recommendation before the final draft of the policy is produced.

Content of the Policy

This section focused on characterising the scope and the content of the policies.

Policy element	Review Finding	Good practice recommendation
Scope	The policy makes clear the range of outputs that are covered and which are not in scope.	The policy should provide a clear definition on the range of outputs that are covered by the policy such as publications, research data and software.
Definition of research data	The policy lacks clarity over what is meant by the term research data.	The policy should provide a clear definition of what is meant by the term research data which can cover a very broad range of output types.
Data sharing	The policy clearly states what is expected of researchers when it comes to sharing research data and provides clarity on legitimate exceptions to data sharing.	The policy should make clear any expectations around data sharing. An emphasis should be placed on making clear whether data sharing is required or is suggested.
		Where data sharing is required, the policy should provide clarity on whether compliance will be monitored.
		The policy should also make clear which legitimate exceptions to data sharing are allowed (e.g., personal sensitive, commercial sensitivity).
		Any embargo periods that are allowed should be clearly stated in the policy.
FAIR (Findable, Accessible, Interoperable, Reusable) Principles	The policy makes explicit reference to the FAIR Principles.	Policies should align with the FAIR principles to lead to the production and reuse of FAIR research outputs. Whether the FAIR Principles are referred to explicitly or implicitly is less important than whether the practical actions relating to FAIR are clearly outlined in the policy.
		Related policy should provide some advice on selecting which data to make and keep FAIR as well as advising on where data should be deposited (e.g., trusted digital repository, institutional repository, domain specific repository).
Metadata sharing	The policy clearly states what is	The policy should make clear any

	expected of researchers when it comes to sharing metadata.	expectations around metadata sharing in particular when the data themselves cannot be shared openly. An emphasis should be placed on making clear whether metadata sharing is required or is suggested. Where metadata sharing is required, the policy should provide clarity on whether compliance will be monitored.
Data Management Plan (DMP)	The policy makes clear whether a data management plan should be developed.	Policies should provide clarity over whether there is an expectation for researchers to develop a DMP as part of their research.
Timing of DMP	The policy makes clear at what stage the DMP should be prepared.	Where DMPs are required, policies should provide clarity over the timing of their preparation and delivery (pre award, in award, post award). If multiple versions are required at different stages, this should be made clear.
Updating of DMP	The policy makes clear that the DMP should be updated but does not specify at which points over the life of the project.	It is advisable that the policy includes an expectation that DMPs will be updated over the research lifecycle.
Data Protection	The policy makes clear reference to data protection as part of research data management.	Policies should make clear any expectations associated with data protection legislation such as GDPR or similar.
Research integrity	The policy does not clearly reference research integrity as part of research data management.	It is advisable that policies and/or related guidance emphasise that data management planning and sharing data supports research integrity goals, enhances data quality and contributes to reproducibility and transparency.
Reference to specific standards	The policy makes clear if any standards or protocols should be followed.	Policies should make clear any expectations in relation to generic and/or domain specific standards or protocols that researchers are expected to adopt during their research.
Repositories	The policy makes clear that trusted digital repositories should be used but does not specify particular repositories or databases for deposit.	Policies should provide clarity about where research outputs should be deposited. It is advisable trusted digital repositories are recommended and wherever possible a list of repository options for specific disciplinary areas are

		provided in related guidance.
Data Availability Statement	The policy lacks clarity on whether a Data Availability Statement is required or encouraged.	Policies should make clear that Data Accessibility Statements are provided in publications indicating how to access the underlying data or to request legitimate access to closed data.
		Conditions for access should also be made clear in the metadata records of the deposited dataset. Policies should require tombstone metadata records be maintained after the data may no longer be available to avoid dead ends (e.g., data is destroyed after a retention period).
Intellectual Property (IP)	The policy addresses IP	Policies should refer to IP and require the use of licences when sharing data to make clear what reuse conditions (if any) must be respected.
Licenses	The policy makes a clear recommendation of license types that should be used when sharing outputs (e.g., CC-BY).	Policies should require the use of licences including waivers when sharing data to make clear what reuse conditions (if any) must be respected.
		Related policy guidance should help researchers to select appropriate licenses.
Data Citation	The policy lacks clarity in relation to expectations around data citation.	Policies should include a clear statement in relation to expectations. Related guidance should provide advice on how to cite a broader range of research outputs including data and software, as well as actors and enablers such as data managers, data stewards, funding bodies, research infrastructures and organisations.
Researcher Identifiers	The policy provides clarity over any requirements relating to the use of researcher identifiers (e.g., ORCiD).	The use of researcher identifiers should be encouraged to support the overall FAIRness of data outputs by enabling them to be linked unambiguously to a specific researcher. The use of researcher identifiers will support emerging technologies, such as Research Graphs.

Preservation	The policy lacks clarity in relation to the length of time selected outputs should be available for beyond the life of the project.	The policy should make clear the period of time beyond the life of the project that they expect that selected outputs be retained.
		Guidance should be provided to assist researchers to assess the potential risks, benefits and associated costs to enable the sharing of FAIR data over time as they draft their DMP.

General Comments:

The policy makes it clear that data and metadata sharing is required and monitored, but the preamble notes that the policy is not legally binding.

It is positive that policy references the preferred use of repositories "that meet global standards (TRUST) in research data stewardship".

Support for the Policy

This section characterised details about the support provided to enable researchers to adhere with the policies.

Policy element	Review Finding	Good practice recommendation
Costs	The policy lacks clarity over whether justified costs associated with RDM and making data FAIR will be supported.	The policy should make clear whether justified costs associated with RDM and making data FAIR are eligible for support. Related guidance should encourage researchers and support staff to collectively identify relevant costs that should be requested in grant applications through the development of a data management plan.
Guidance	It is not clear whether associated guidance is provided to help researchers adhere with the policy.	Policymakers should provide access to generic guidance to help researchers to comply with their policies. Where relevant and where resources allow, policymakers should provide access to domain specific guidance.
Monitoring	The policy makes clear that compliance will be monitored.	Policies should make clear how and when compliance will be monitored. If monitoring will take place, rewards for compliance and/or penalties for non-compliance should be made clear.

General Comments:

The policy notes that "[t]he Tetiaroa Society will identify a delegate to check compliance to the Policy", but it is not specified when this will be done; this is something that should be added to the final draft of the document.

Review Summary

Though the policy is in its developmental stage at the time of the review, the scope and aims of the policy are clear. Overall, the policy addresses each aspect of research data management sufficiently.

There are areas that should be addressed, including the policy implementation and scheduled review dates, the length of time for which data derived from Tetiaroa should be preserved, and responsibility for policy compliance monitoring. However, there should be sufficient space in any future review or drafts of the current version to address these areas in the current format.

We would be grateful if you would review our assessment and alert us to any elements that you feel are incorrect.

Thank you for taking part in the FAIRsFAIR Policy Support Programme!

Next steps

As described in the offer of policy support, three workshops will be convened in late 2021 for the policy support cohort.

Workshop 1 will take place on October 28th from 15:15-17:00 BST. This workshop will summarise the overall approach taken for the policy reviews and share the collective findings. We'll share examples of good practice as well as identify common areas where further work may still be needed.

Workshop 2 will take place in November 2021 (dates TBC) and provide an overview of FAIRsFAIR's Assessing Capability Maturity and Engagement with FAIR-enabling Practices (ACME-FAIR) framework and provide guidance on how to carry out a self-assessment of FAIR-enabling practices.

Workshop 3 will take place in December 2021 (dates TBC) and focus on the role of structured and machine readable policies in supporting the vision of the European Open Science Cloud and provide pointers on creating, updating and making structured policy profiles visible. The workshop will also feature a moderated discussion on which structured policy elements should be included as standard in Open Science policies to support future monitoring of the policy landscape.