Methodology

How will data be collected or produced?

Access, Data Sharing and Reuse

Will you require an embargo period prior to making your prepublication data available? If requested, an embargo period may be granted for up to [1 year] after the end date of the Project as specified in its Data Management Plan.

- Yes
- No
- Under specific circumstances

Guidance:

Projects are encouraged to waive an embargo period. If requested, an embargo period may be granted for up to [1 year] after the end date of the Project as specified in its Data Management Plan. During any embargo period, metadata is publicly available but pre-publication access and use of the data is permitted only for TS and any third parties who have agreed to abide by the IDEA Code of Conduct (see Exhibit 1). After any embargo period, TS may release data under the default license established for the Tetiaroa Data Trust (see Article 2).

Do you agree to share all prepublication data contributed to the Tetiaroa Data Trust under the CC-0 license?

- Yes
- No
- Alternative license arrangement

Will your project include the collection of material samples? For example, archeological, geochemical (geosamples), and biological (biosamples) materials.

- Yes
- No

Please describe standards you will utilize to register sampling events, apply unique identifiers, implement relevant metadata standards, and track derived material samples, data, and outputs.

Guidance:

Any collection of material samples on Tetiaroa shall register sampling events, apply unique identifiers, implement relevant metadata standards, and track derived material samples, data, and outputs. Furthermore, in accordance with the Convention on Biological Diversity (Nagoya Protocol) and associated regulations of the French Polynesian government, all Projects collecting biosamples on Tetiaroa must comply with the "Tetiaroa Access & Benefit Sharing (ABS) Agreement".

What are the further intended and/or foreseeable research uses for the completed dataset(s)?

State any expected difficulties in data sharing, along with causes and possible measures to overcome these difficulties.

Documentation and Metadata

What documentation and metadata will accompany the data?

Guidance:

Questions to consider: What information is needed for the data to be to be read and interpreted in the future? How will you capture / create this documentation and metadata? What metadata standards will you use and why? Describe the types of documentation that will accompany the data to help secondary users to understand and reuse it. This should at
least include basic details that will help people to find the data, including who created or contributed to the data, its title, date of creation and under what conditions it can be accessed. Documentation may also include details on the methodology used, analytical and procedural information, definitions of variables, vocabularies, units of measurement, any assumptions made, and the format and file type of the data. Consider how you will capture this information and where it will be recorded. Wherever possible you should identify and use existing community standards.

**Ethics and Intellectual Property**

How will you manage copyright and Intellectual Property Rights (IP/IPR) issues? Demonstrate that you have sought advice on and addressed all copyright and rights management issues that apply to the resource.

*Guidance:*

Questions to consider: Who owns the data? How will the data be licensed for reuse? Are there any restrictions on the reuse of third-party data? Will data sharing be postponed / restricted e.g. to publish or seek patents? State who will own the copyright and IPR of any data that you will collect or create, along with the licence(s) for its use and reuse. For multi-partner projects, IPR ownership may be worth covering in a consortium agreement. Consider any relevant funder, institutional, departmental or group policies on copyright or IPR. Also consider permissions to reuse third-party data and any restrictions needed on data sharing.

How will you handle sensitive data. Make explicit mention of consent, confidentiality, anonymization and other ethical considerations, where appropriate.

*Guidance:*

Some data types or samples require special consideration, such as those associated with traditional knowledge, archeological artifacts, endangered species, medical data, and human subject research. These will be reviewed on a case by case basis by the TS Scientific and Cultural Advisory Boards. Specific recommendations might include, for example, the use of Traditional Knowledge (TK) Labels, which were developed to: “support Native, First Nations, Aboriginal, and Indigenous communities in the management of their intellectual property and cultural heritage specifically within the digital environment”, and BioCultural (BC) Labels, which extends the TK Label initiative to genetic resources.

Are any restrictions on data sharing required – for example to safeguard research participants or to gain appropriate intellectual property protection?

- Yes
- No
- Under specific circumstances

Describe restrictions on data sharing required due to privacy or IP protection.

**Short-Term Storage, Security, and Data Management**

Describe the planned quality assurance and back-up procedures, including security/storage and any use of encryption.

*Guidance:*

Questions to consider: Do you have sufficient storage or will you need to include charges for additional services? How will the data be backed up? Who will be responsible for backup and recovery? How will the data be recovered in the event of an incident? State how often the data will be backed up and to which locations. How many copies are being made? Storing data on laptops, computer hard drives or external storage devices alone is very risky. The use of robust, managed storage provided by university IT teams is preferable. Similarly, it is normally better to use automatic backup services provided by IT Services than rely on manual processes. If you choose to use a third-party service, you should ensure that this does not conflict with any funder, institutional, departmental or group policies, for example in terms of the legal jurisdiction in which data are held or the protection of sensitive data.

How will you manage access and security?
**Guidance:**

Questions to consider: What are the risks to data security and how will these be managed? How will you control access to keep the data secure? How will you ensure that collaborators can access your data securely? If creating or collecting data in the field how will you ensure its safe transfer into your main secured systems? If your data is confidential (e.g. personal data not already in the public domain, confidential information or trade secrets), you should outline any appropriate security measures and note any formal standards that you will comply with e.g. ISO 27001.

Specify the responsibilities for data management and curation within research teams participating in your project at all participating institutions.

**Selection and Preservation**

Which data are of long-term value and should be retained, shared, and/or preserved?

**Guidance:**

Questions to consider:

- What data must be retained/destroyed for contractual, legal, or regulatory purposes?
- How will you decide what other data to keep?
- What are the foreseeable research uses for the data?
- How long will the data be retained and preserved?

Consider how the data may be reused e.g. to validate your research findings, conduct new studies, or for teaching. Decide which data to keep and for how long. This could be based on any obligations to retain certain data, the potential reuse value, what is economically viable to keep, and any additional effort required to prepare the data for data sharing and preservation. Remember to consider any additional effort required to prepare the data for sharing and preservation, such as changing file formats.

What is the long-term preservation plan for the dataset?