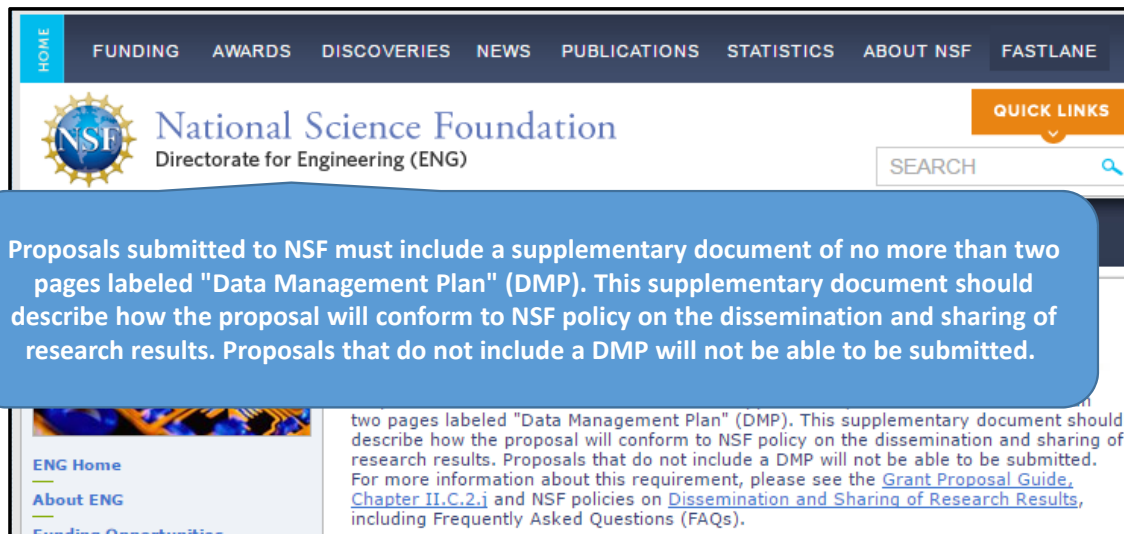


Source: <https://www.iisc.ac.uk/guides/research-data-management>  
License: <http://creativecommons.org/licenses/by-nc-nd/3.0/>

# Introduction and Resources on Data Management

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# Funder Requirements



The screenshot shows the NSF Directorate for Engineering (ENG) website. A blue callout box highlights a requirement: "Proposals submitted to NSF must include a supplementary document of no more than two pages labeled 'Data Management Plan' (DMP). This supplementary document should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results. Proposals that do not include a DMP will not be able to be submitted." The background text on the website repeats this requirement and provides links to the Grant Proposal Guide, Chapter II.C.2.j, and NSF policies on Dissemination and Sharing of Research Results, including Frequently Asked Questions (FAQs).

- Research Grants Council, Hong Kong – Explanatory Notes for [General Research Fund \(GRF\)](#)

“One of these principles states that it is “appropriate to use public funds to support the management and sharing of publicly-funded research data”. - RCUK

Release of completion report, data archive possibilities and public access of publications resulting from research funded by the RGC  
PI should assess data archive potential and opportunities for data sharing. Due additional weight will be given to an application where the applicants are willing to make research data available to others.

# Data Management Plan (DMP)

- DMP is a document that **describes what data will be collected or generated** and **how they will be handled** during or after the project.
- Some **common components** in a DMP include:
  - Types of data produced or collected
  - Access, sharing and re-use policies
  - Confidentiality and intellectual property
- Some software tools can help on compiling DMP
  - [DMPTool](#) (by University of California)
  - [DMPonline](#) (by UK Digital Curation Centre)



# Data Publishing

- Many [journal publishers](#) now require article authors to provide [well-documented data](#) used in the research and make these data [easily available](#) to other researchers.
- Examples of major publishers and their policies:
  - Elsevier - [Research Data](#)
    - a platform to support researchers to store, share, discover and use data)
  - Nature - [Availability of data and material and methods](#)
    - ... authors are required to make materials, data, code, and associated protocols promptly available to readers without undue qualifications
  - Taylor & Francis - [Enhancing your article with supplemental material](#)
    - a number of initiatives to ensure supplemental material is effectively included, or linked to, within the article abstract.

# Data Repositories & Discovery Tools

- Data Directories
  - [re3data](#) - A global registry of research data repositories from different academic disciplines.
  - [Directory of Open Access Repositories \(OpenDOAR\)](#) - A directory of institutional and subject-based repositories in the world.
  - [Selected Discipline-Based Data Archives](#) from University of Minnesota.
  - [Selected Subject-Specific Data Repositories](#) from Stanford University Libraries.
- Specialist repositories
  - [GenBank](#), [NeuroMorpho.org](#), [HepData](#), [EarthChem](#), [PubChem](#), [ICPSR \(openICPSR\)](#), [Harvard Dataverse](#), [Protein Databank](#), etc.
- Institutional (project-based) repositories
  - [DataSpace@HKUST](#)

# Data Citation

- Citing data brings the **same benefits** as citing articles and books because it
  - helps data creators and users **find, access, verify and reuse** data
  - allows **data impact** to be tracked
  - gives proper **recognition** to data producers
- Examples:

Creator (Publication Year): Title. Publisher. Identifier

Irino, T; Tada, R (2009): Chemical and mineral compositions of sediments from ODP Site 127-797. Geological Institute, University of Tokyo. <http://dx.doi.org/10.1594/PANGAEA.726855>

Creator, Publication Year, "Title", Identifier, Publisher, Version, [Universal Numerical Fingerprint]

Campbell, Cameron Dougall; Lee, James; Dong, Hao, 2015, "Longitudinal Links to Construct the Korean Multi-Generational Panel Dataset – Tansung (KMGPD-TS) from the Tansung Household Registers", <http://dx.doi.org/10.14711/dataset/IVIDZV>, DataSpace@HKUST, V1  
[UNF:6:dSzr9ZfpI4QhmtlZRtXBRg==]

# Data Discovery & Sharing

- Adding DOIs to finalized data sets
  - Makes data publications more acceptable for CVs
  - Creates more recognition for data sharing
  - Provides a means of tracking publications
- Creating your own ORCID iD for publishing
  - ORCID iD is a unique researcher identifier for distinguishing your data/article publications from those of others with similar names
  - You can establish clear ownership of your scholarly output
  - HKUST faculty & RPg students have already registered their ORCID iDs
  - You can use your HKUST login to easily create yours in a few clicks via <http://repository.ust.hk/orcid/>

ORCID

Connecting Research  
and Researchers

# Information on Data Management

Scholarly Communications > Data Management

## Data Management

	<b>Research Data Management Service Kit</b> <p>This service kit will help you plan &amp; create, organize &amp; manage, access &amp; share your research data during and after a project.</p>		<b>Why Research Data Management</b> <p>Does this have anything to do with my research project? Click and read about the benefits and needs of managing and archiving your research data.</p>
	<b>Data Management Plans</b> <p>When do I need to write a data management plan and how? Find out more about data requirement policies of funding bodies.</p>		<b>Data Repositories &amp; Discovery Tools</b> <p>Depositing your research data in an archive will facilitate its discovery and preservation. This guide can help you to select data repository suitable to your needs.</p>
	<b>Standards, Guidelines, Best Practices &amp; Training</b> <p>How to start with research data management? Here is some helpful information that you may need.</p>		<b>Data Citation</b> <p>What are the benefits of citing data? Find out how to create data citation.</p>
	<b>DataSpace@HKUST</b> <p>This is the data repository and workspace service for HKUST research community. Researchers can manage, archive and publish their research data here.</p>		<b>Funder Requirement &amp; Publisher Policies on Data</b> <p>Many funding agencies have provided policies on data sharing. Some publishers also require well-documented data for purpose of replication.</p>

<http://library.ust.hk/sc/>