BIBLIOGRAPHY

(ARDC), A. R. D. C., 2018. Research Data Rights Management Guide. [Online].

(CRUK), C. R. U., 2009. Data Sharing Guidelines. [Online]
Available at: https://www.cancerresearchuk.org/funding-for-researchers/applying-for-funding/policies-that-affect-your-grant/submission-of-a-data-sharing-and-preservation-strategy/data-sharing-guidelines

(MOSP), M. O. S. P., 2020. Infographic: New Career Path Acknowledging Open Science Practices. s.l.:s.n.

(MOSP), M. O. S. P., 2020. Infographic: Research Data Lifecycle. s.l.:s.n.

(NSF), N. S. F., 2011. Data Sharing Policy. [Online].

(UKRI), U. R. a. I., n.d. Common Principles on Data Policy. [Online].

Bradley, C., 2013. Implementing Effective Data Governance. [Online]
Available at: https://www.slideshare.net/inforacer/impdata-gover

Brous, P., Janssen, M. & Krans, R., 2020. Data Governance as Success Factor for Data Science. s.l.:Springer.

Candela, L., Castelli, D. & Pagano, P., 2013. Virtual Research Environments: An Overview and a Research Agenda. s.l., Data Science Journal.

Council, S. R., 2015. Proposal for national guidelines for open access to scientific information, Stockholm: s.n.

Ferrari, T., Scardaci, D. & Andreozzi, S., 2018. The Open Science Commons for the European Research Area. In: Earth Observation Open Science and Innovation. s.l.:Springer.

Group, T. C. W., 2016. Concordat on Open Research Data. [Online]
Available at: https://www.ukri.org/wp-content/uploads/2020/10/UKRI-020920-ConcordatonOpenResearchData.pdf

Guidelines, M. O. S. A. W. G. o., 2020. First Stakeholder Engagement Rapporteur Report, s.l.: s.n.

Guidelines, W. G. o., 2020. Minutes of 3rd Meeting. s.l.:s.n.

Ladley, J., 2019. Data Governance: How to Design, Deploy, and Sustain an Effective Data Governance Program. 2nd ed. s.l.:Elsevier.

Mathieu, P.-P. & Christoph, A., 2018. Earth Observation Open Science and Innovation. s.l.:Springer.

OECD, 2007. OECD Principles and Guidelines for Access to Research Data from Public Funding, s.l.: OECD Publishing.

Springer, n.d. What is Open Access. [Online]
Available at: https://www.springer.com/gp/authors-editors/authorandreviewertutorials/open-access/what-is-open-access/10286522

APPENDICES

CHAPTER 6

Appendix 6.1. Checklist for Implementation of Raw Research Data Repositories at Institutes of Higher Learnings, Government Research Institutes and Non-government Research Institutes

Number	Activity	Status (/)
1	Establishment of a new or existing governance structure to develop planning, execute tasks and activities according to the implementation planning related to Open Science.	
2	Development and implementation of Open Science-related policies such as Research Data Management Policy.	
3	Establishment of institutional repositories or identification of data publishing partners repositories for raw research data deposition.	
4	Identification of raw research datasets that can be deposited on institutional repositories or data publishing partners' repositories.,	
5	Ensuring that the respective repositories are supported with a backup system, scalable and interoperable to Malaysia Open Science Platform (MOSP) Portal.	
6	Ensuring that the data classification for the data repository systems are determined.	
7	Ensuring that the data repository systems are established with a strong and robust security system, possibly with ISO 27001.	
8	Formal training for data stewards and their active participations in Open Science activities including to assist researchers to develop a Data Management Plan.	
9	Formal training for Principal Investigators and researchers about key practices for Open Science and preparation to write a Data Management Plan.	
10	Formal education for undergraduate, graduate and postgraduate students to equip them with essential knowledge and skills about principles and best practices for Open Science.	
11	Preparation of a Data Management Plan is made compulsory for research grant beneficiaries at institutional levels.	
12	Recognition of Open Science and data sharing practices in the form of academic rewards systems, such as for security tenure and career promotion assessment.	
13	Effective communication about Open Science and its incentives across all levels.	
14	Review and evaluate implementation and address emerging gaps.	

APPENDIX 6.2. Checklist for Researchers Readiness to Share Raw Research Data

Reference: https://guides.library.uq.edu.au/c.php?g=500758&p=3429166

Number	Activity	Status (/)
Before depositing raw research datasets		
1	A researcher creates an ORCID identifier before proceeding to publish raw research data.	
2	In the case of publishing raw research data that underpins a publication, a researcher must ensure that the datasets contain all the information needed to support the conclusions and quantitative statements as evidenced in the publication.	
3	Make decisions on types of access to the raw research data. Although ideally, raw research data should be made shareable, conditional or restricted access are also available under the institutional repository.	
4	Identify if the files saved with file extensions are acceptable to the institutional repository. If it is not, identify alternative file extensions that are acceptable.	
5	Consider converting the files into a non-proprietary form to increase access and use of your data.	
6	Prepare and upload supplementary documentation of raw research data that better explain the data to decrease misinterpretation of the data.	
7	Prepare and upload a Data Management Plan that tags along with the raw research datasets. Consult a data steward when developing the document.	
8	Specify if there is an embargo period applicable to the raw research data.	
9	Nominate a data steward or contact person for the raw research datasets in case the originator or creator of the raw research data cannot be contacted.	
Legal, ethical and commercial considerations		
11	Identify if the created raw research datasets arise from the institution that houses the repository. This also includes projects conducted with other institutions.	
12	Verify if the funding agreement permits the raw research datasets to be published at an institutional repository.	
13	Verify if there is any third-party data included in the files? If yes, has it been consented by the third-party for it to be deposited and published?	
14	Verify if the raw research data has confidentiality implications upon sharing it on an institutional repository. Special actions must be undertaken to treat such datasets, including anonymisation.	
15	Verify if the raw research data may concern a pending patent. Special actions must be undertaken to treat such datasets. Clarify with a technology transfer office if the data is commercially exploitable.	

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