

Guidance for Developing a Research Data Management (RDM) Policy

This document provides the essential elements of a Research Data Management (RDM) Policy and is part of the LEARN Toolkit containing the **Model Policy for Research Data Management (RDM) at Research Institutions/Institutes.**

The elements below may be used to define research data, explain RDM, illustrate workflows, point out benefits and give information about funding agency requirements. Please note that in order to facilitate the measurability of the policies and their impact, they should be created in a machine actionable format. Furthermore, indicators may be used for automated validation processes.

Elements	Description
Header info	Document title
	Institutional logo
Title of policy	Description of the pursued issue
Subtitle	If necessary: extension of the title
	> Research data is one part of the knowledge capital of research institutions. In data-driven science, good data management promotes discovery, efficiency, and increases reliability by ensuring consistent quality with a high level of comparability. The policy may be strongly connected to strategic alignments and strategic management. It could help in building the bridge from technical requirements to skills and competencies.
	> Research data management is considered as a whole in the policy (including research records, methods, software, code etc.).
	> These principles will determine the organisation's behaviour.
	> These principles also apply to the behaviour of individuals within the institution.
	> The policy (with annexed documents) should contain definitions , indicating answers to these questions:
General remarks	What is "research data"?
before getting	What is "research"?
started	Who is a "researcher"?
	> The following should be clear:
	 Authorship of the policy. It should be clear who defines the policy ("the speaking entity") and why this entity (author of the policy) defines the policy. What is the role of "the speaking entity" (authorship)?
	 Aim of the policy. Why does a research institution/institute have a policy? What is the goal of the policy? What does the institution want to achieve?
	 Subject. According to the statutes of the institution and its published guidelines: What is the subject of the policy?

Preamble Refers to Point 1 of the Model Policy	The preamble describes the context:
	> It is an introductory statement or a description of an initial situation.
	> It defines why there should be a policy and how to contextualize it within the institution. This part has to be localised by each institution and aligned with the prevailing philosophy and mission of the institution.
	> Scientific disciplines and organizations produce and manage different types of materials which might have different guiding principles. It is essential that consistency is brought to the field in the form of research institution/institute-level policies.
	> The fundamental truths or propositions that serve as the foundation for the chain of reasoning of the policy should be described.
	> The scope of the policy must be defined according to space and time.
Jurisdiction Refers to Point 2 of	> The relationship between the policy and research institution/institute and non-research institution/institute guidelines and statutes must be clarified in the policy.
the Model Policy	> Compliance with legal and contractual provisions must be maintained.
	According to the FAIR principles, the fundamental purpose of rights definition is to encourage re-use and collaboration.
	> In this section, rights must be defined according to the questions:
	Who owns research data?
	 And who holds rights in such data?
	This is a fundamental question. With regard to research data protected by law, this question can be answered by legal advisers.
	> The following aspects must be considered:
	• terms of use
	 questions of licensing and subsequent use of data
	 data protection aspects, including relevant legal requirements
Intellectual	 privacy rights, usage rights, exploitation rights and copyrights
Property Rights Refers to Point 3 of	> In cases where no law fittingly applies to a specific piece of research data, the policy will apply to intellectual property rights, etc.
the Model Policy	> The policy must take into account all contracts made with funders, as well as contracts between researchers and their institutions, which have precedence.
	You might include the following sentence:
	The research institution will make research data available under an open licence, unless legal obligations, third party rights, intellectual property rights and privacy rights preclude this. The licence is selected according to the type of data and in order to label the data and facilitate its utilization. An example for a Source Code Licence would be the General Public Licence (GPL). For all other kinds of data, CCO or CCBY licences can be used. Data which are not subject to any copyright restrictions should be clearly marked as such with for instance the Creative Common Public Domain Mark. In some cases copyright belongs to the institution that employs the researcher, so there may be a question regarding who has the right to choose a licence.

- > This section refers to all processes for dealing with one's own and other people's data throughout and after the scientific discovery process.
- > The policy refers to any research data generated within the institution, for instance in education, cultural heritage and institutional management.
- > It is important to define how research data are to be changed, documented, used, secured, archived, publicized and the conditions under which data may subsequently be used. Thus, this section reflects the **FAIR data principles**, meaning that data are Findable, Accessible, Interoperable and Re-usable.
- > It should be clear which **exceptions** exist in the policy and to what extent they apply. This may also concern the "right to be forgotten" (**deletion of data**).
- > Concerning **deletion** (deleting): This defines which data can or must be deleted and who decides to carry this out.
- > Concerning **retention of data**: The minimum recommended period for retention of research data is 10 years. However, in some particular cases it should be considered that:
 - for short-term research projects that are for assessment purposes only, such as research projects completed by students, retaining research data for 12 months after the completion of the project may be sufficient
 - for some research projects retaining research data for 15 years or more may be necessary (e.g. clinical trials)
 - for other areas (e.g. gene therapy, seismological data), research data must be retained permanently
 - if the work has community or heritage value, research data should be kept permanently, preferably within a national collection
- > The policy should contain a statement showing which policy takes precedence when research is funded by external funders, and showing the expectations placed by the institution on external research partners.
- > Concerning **storage and access**: The policy should address where data will be stored and how it will be accessed. If possible, there should be a recommendation for the use of **institutional research infrastructures**.
- > If needed or foreseen, regulations for
 - open data

Handling

research data

Refers to Point 4 of

the Model Policy

- restricted data
- and/or closed data should be specified

138 LEARN THE MODEL RDM POLICY 139

	> This section defines the coverage of the policy:
	• institutional
	• faculty-wide (or other organizational units)
	discipline-wide
	• group(s) of people covered: such as research staff, research support staff, IT services, students
	> The scope and coverage of the policy should be checked:
	Does the policy include all research data?
	 Does the policy include/exclude a selection of the non-digital results of research processes?
	> Regulations concerning the responsibilities , rights and duties of the following persons and institutions should be formulated with regard to research data:
	 researchers and research data producers (e.g. PhD students)
	 funders and funders' regulations (the policy should acknowledge that funders have rights and regulations, and show that these will be given precedence where appropriate)
Responsibilities, Rights, Duties	• institutions
Refers to Point 5 of the Model Policy	• research supporting entities (for example, libraries, IT services, research support centres, etc.)
	> If necessary, there should be a recommendation for institutional research infrastructure.
	> Questions around the costs of RDM (including stewardship of data) as stated in a data management plan (DMP), as well as who bears those costs, should be well defined. This could also include costs that occur after a project has ended.
	> It is important to define roles , responsibilities and competencies in order to assign objectives and define time frames. Relevant questions:
	Who is in charge of ensuring legal compliance?
	Who will provide legal advice?
	Who is in charge of the quality of the content?
	Who is in charge of defining acceptable formats?
	Who is in charge of maintaining the currency of formats over time?
	Who will provide technical support?
	Who will promote services?
	Who will provide training?
	> This pertains to the date of release of the policy and how long the current
Approval of the policy, periodic review, validity and timeline	policy will be valid. This can be done on a regular basis, which may be externally defined, or based upon needs. The key dates must be included.
	> The policy should be subjected to periodic review . The changes in each revision must be listed.
	> The relevant questions here are:
Refers to Point 6 of the Model Policy	How long are the terms of the policy valid?
	 Who/which body is responsible for reviewing and updating the policy?
	What should be done after the end of the defined timeline or period?
Footer info	Page number
	Version number
	• Status
	• etc.
Annoves	Definition of key terms
Annexes	Definition of key terms - Everythe from / links to relevant funder policies or everything.
Refers to Annex	Excerpts from / links to relevant funder policies or expectations
of Model Policy	List of related institutional policies (with links)

See also the LEARN Project Glossary: http://learn-rdm.eu/en/dissemination/glossary/; last accessed 12/2/17

