Jamk Policy for Open Research Data, Open Methods and Open Infrastructures

This guideline defines the guiding principles, according to which the Jamk University of Applied Sciences (Jamk) advances open research data, open methods and open infrastructures. By signing the <u>Declaration for</u> <u>Open Science and Research 2020–2025</u>, which is complemented by national policies and recommendations, Jamk is committed to advance open science and research. This Jamk guideline follows the <u>Policy for Open</u> <u>Research Data and Methods</u> published by the National Open Science and Research Coordination.

Definitions:

- Research data include those digital and physical resources used during research or development activities, on which the results and conclusions of these activities are based (cf. Research management vocabulary: research data. <u>https://sanastot.suomi.fi/en/terminology/3bdbcac2-e57f-49c1-b104-e37eff042834/concept/37ffc144-7fdd-4f0f-8f4a-3937ae80dbc2</u>, accessed 3 May 2024).
- Research method is "a planned and documented procedure for conducting research and compiling and processing research material in a way that produces research results" (Research management vocabulary: research method. <u>https://sanastot.suomi.fi/en/terminology/3bdbcac2-e57f-49c1b104-e37eff042834/concept/c7334ce5-30ff-4193-926d-90d8fdeaa228</u>, accessed 3 May 2024).
- Research infrastructures are "instruments, equipment, information networks, databases, materials and services that serve to facilitate research, promote research collaboration and reinforce research and innovation capacity and know-how." (Research Council of Finland, <u>https://www.aka.fi/en/research-funding/programmes-and-other-funding-schemes/researchinfrastructures/</u>, accessed 3 May 2024).

Jamk follows the general principle of open science and research, according to which research and development activities need to be "as open as possible, as closed as necessary". The goal is to provide extensive openness of research data, research methods and research infrastructures while acknowledging justified limitations to openness due to confidentiality of personal information, commercial activities or other legitimate reasons.

Open data, methods and infrastructures increase the quality, visibility and impact of Research, Development and Innovation (RDI) activities in Jamk. Data, methods and infrastructures are seen as independent research outputs, and their visibility and reuse are considered as merits for the authors, collectors and operators of data, methods and infrastructures.

Commitments behind the guideline:

 <u>Declaration for Open Science and Research 2020–2025</u> and the complementing policy: <u>Policy for</u> <u>Open Research Data and Methods</u>. National policy and executive plan by the higher education and research community for 2021–2025: Policy component 1 (Open access to research data) and 2 (Open access to research methods and infrastructures).

- <u>The Finnish Code of Conduct for Research Integrity and Procedures for Handling Alleged Violations</u> of Research Integrity in Finland 2023
- Law on the reuse of publicly funded research data 713/2021

Open Data

Research data is managed following the FAIR principles, which guide to the responsible handling of data and promote their openness. According to the FAIR principles, data should be as *Findable, Accessible, Interoperable* and *Reusable* as possible. The FAIR principles can be achieved with systematic management of data (Data Management Plan, DMP), descriptive information of the data (metadata), open licensing and clear and easy-to-use storage solutions. Well-described and open data sets are recognized as independent research outputs and as merits for their authors. When describing the data it is possible to link a persistent identifier to the data set (DOI or equivalent), which makes the data more findable and easier to cite.

Open data requires planning, which begins already before the data collection. Those who collect and handle the data need to acknowledge what kind of data is being collected, for what purpose the data is collected, how it is stored during the project and what happens to the data after the work is finished. Planning is conducted by using Data Management Plan (DMP), which is a compulsory document in every data producing RDI project.

Research data is considered open, when the data which is not required to remain closed due to a specific reason, is described and opened for viewing and possible reuse with open licensing. Possible reasons for the data to remain closed or shared only upon reasonable request include personal or otherwise sensitive data, business secrets, protecting intellectual property rights or wish of the partners to remain unidentified. Open data can be advanced also in these cases by following the FAIR principles. Furthermore, even if the data remains completely or partly closed, the metadata (i.e. description of the data) can be published.

Jamk and possible research funders have guidelines which specify how to realize good practices in open data and data management. These need to be followed. Following the rector's decision (id 365250) we encourage utilizing national and international services following EU regulations and advance visibility in the national Research Information Service (research.fi).

Open Research Methods and Infrastructures

In order to evaluate the achieved research results it is necessary to report on the used methods and infrastructures in detail. Research methods can be research outputs as well (e.g. a data or method publication, code etc.), and following the principles of open science and research, their reuse is being encouraged. A method/code data can be findable and reusable as its own publication or they can be described and archived into a national or international repository. Open licensing furthers the openness of methods.

It is recommended to describe the research infrastructures to the Research Information Service (<u>research.fi</u>) in order to make them findable and reusable.

Open research methods and infrastructures are non-profit services, which does not mean that their use does not contain any fees. Reasonable payments for their use can be collected so that the services can be maintained and so that the use of publicly funded infrastructures does not distort commercial competition.