

POLICY FOR OPEN SCHOLARSHIP - DRAFT

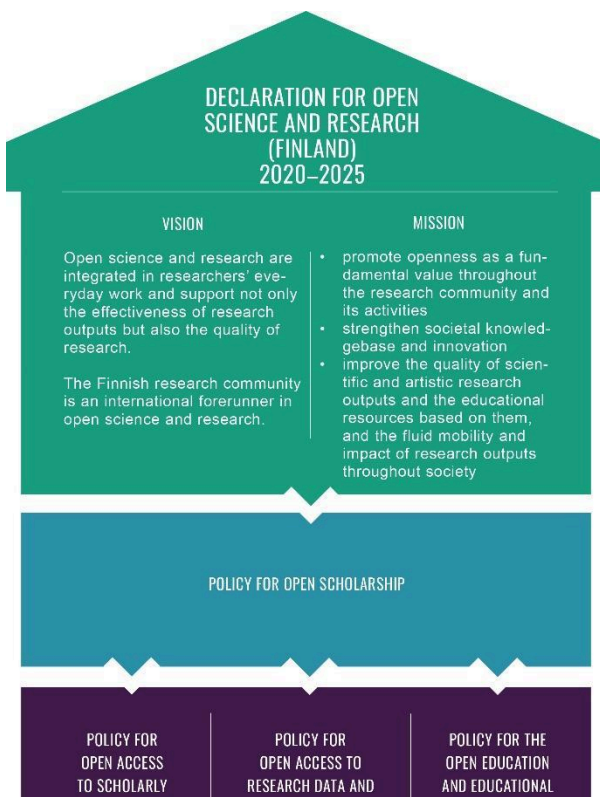
Public commenting from 9th of November to 20th of December, 2021

[The comment form](#) has the following questions

1. Comments on the principle 1 of the Policy
2. Comments on the principle 2 of the Policy
3. Comments on the principle 3 of the Policy
4. Comments on the objective 1 of the Policy
5. Comments on the objective 2 of the Policy
6. Comments on the objective 3 of the Policy
7. Comments on the objective 4 of the Policy
8. Comments on the objective 5 of the Policy
9. Comments on the objective 6 of the Policy
10. Comments on the objective 7 of the Policy
11. Comments on the introduction of the Policy
11. General comments on the Policy

1. Introduction

Culture for open scholarship requires a change in culture, i.e. new courses of action. In order for culture to become more open, an organisation can require changes in the courses of action and, at the same time, it must offer services and incentives to support the activity.



In accordance with the Declaration For Open Science and Research 2020–2025, the Finnish research community has drawn up a policy for open scholarship. The starting point of the policy is to support the strategic goal set out in the Declaration, according to which "responsible openness is part of daily life in the research community and it permeates the entire research process, and research organisations have the evaluation practices, incentives and services needed to support open science and research." (Figure 1).

When drafting the policy, all previous policies and recommendations made within the framework of the Open Science Coordination in Finland have been reviewed. The policy for open scholarship brings together the perspectives of previous policies so that the focus is now on the culture of open scholarship of an organisation. The principles of open administration, incentives and interaction are new perspectives that complement the previous policies. The policy does not address all aspects of open science interaction, such as interaction with decision-makers, but instead focuses on less discussed topics, citizen science and business collaboration.

Culture of open scholarship

Interaction is a way of operating and an essential part of the culture of open science. This policy focuses on the open nature of the organisation's courses of action, including the coordination, implementation and monitoring of open science services, [transparency in the organisation's own activities and administration](#) and support for researchers' interaction with society.

Responsible evaluation

In 2020, [Good Practice in Research Evaluation. Recommendation for the responsible evaluation of a researcher in Finland](#), produced by a broad-based working group assembled by the Federation of Finnish Learned Societies, was published. Although the Recommendation for the evaluation of a researcher in Finland has been drafted from the point of view of an individual researcher evaluation, the recommendation states that “the same principles should also be followed when evaluating research organisations, research units and research in a broader context”.

As the Recommendation for the responsible evaluation of a researcher in Finland comprehensively handles evaluation practices, and also incentives at a general level, this policy focuses in particular on services promoting responsible evaluation but also emphasises the importance of incentives for organisations to promote open science and operating culture. With regard to incentives, the Recommendation for the responsible evaluation of a researcher in Finland states that the evaluation of scientific quality will widely consider research output in different formats and languages. The evaluation must also take into account the considerations of open science, including activities to promote open access, compliance with the ethical principles of research, activities as a teacher and supervisor, societal impact and interaction, and activities in research and other communities. The recommendations for action in the policy for open scholarship support the implementation plan in the policy for responsible evaluation.

Business collaboration

This is the first national policy for open science in Finland that handles business collaboration. Business collaboration refers to collaboration between research organisations and companies for consideration or free of charge, which may vary from informal interaction to organised collaboration. Forms of collaboration include contract research, commissioned research, training

and consulting. The collaboration can be funded by a public or private sector organisation. Research projects conducted in business collaboration should take into account the European and national objectives of open science. Those working in the business world are usually not familiar with the open science practices stemming from the world of science. For this reason, the promotion of open science is often the responsibility of the researcher and the research organisation in research projects conducted in business collaboration.

In research projects conducted in business collaboration, the starting points for promoting openness are trust and understanding of the objectives and needs of the other party. Collaboration between researchers and companies is governed by a number of laws, the conditions of those funding the research and responsible conduct of research. Research activities conducted in business collaboration and in line with open science must balance between open and confidential information, so the open access to research data, communication and publication of results must be agreed upon with an agreement between the research organisation and the company participating in the research. The key content of the discussion and agreement is how research results, data and material from business collaboration can be utilised and/or disseminated safely, efficiently and as openly as possible taking the interests of different parties into account.

As part of creating the policy for open scholarship, the work group for open collaboration with companies has prepared a recommendation on the implementation of open science practices in research, development and innovation activities (RDI activities) between research organisations and companies. The guidelines are intended for researchers working in research organisations and research support service personnel who prepare and conduct RDI projects in collaboration with companies. It also includes a check-list and can be customized to meet the needs of each organization. Key issues to be taken into account in business projects have been highlighted as actions in the policy for open scholarship.

Citizen science

This is the first national policy for open science in Finland that handles citizen science. Throughout history, amateur scientists have participated in science in different ways. However, the development of universities and other research organisations, the complexity and distance of research questions from everyday life as well as the need to maintain expensive and complex equipment have limited citizens' participation in scientific research over the past decades. Although some projects depend on the efforts of citizens, research organisations have in recent decades carried out research projects to a large extent without the participation and interaction of amateur scientists.

This situation is, however, changing rapidly. The introduction of new information and communication technologies has improved access to scientific results and information, and as a result, citizens' participation in science has increased. Constantly evolving information and communication technologies improve the opportunities for amateur scientists to participate in

scientific projects and thus promote public awareness of scientific processes and methods. Interaction between research organisations and the rest of the community is also an effective means of reducing the negative social impacts of fake news and disinformation.

Education

In 2020, [Open education and educational resources. National policy and executive plan by the higher education and research community for 2021–2025. Policy component 1 – open access to educational resources](#) was published. The policy for open scholarship supports and complements the implementation of the policy for education, but this policy does not alter the target timetables presented by previous policies and recommendations.

Research data

In 2021, [Open research data and methods. National policy and executive plan by the higher education and research community for 2021–2025. Policy component 1: Open access to research data](#) was published. The policy for open scholarship supports and complements the implementation of the policy for research data, but this policy does not alter the target timetables presented by previous policies and recommendations.

Publications

In 2019, [Open access to scholarly publications. National Policy and executive plan by the research community in Finland for 2020–2025 \(1\):Policy component for open access to journal and conference articles](#) was published. The policy for open scholarship supports and complements the implementation of the policy for publications, but this policy does not alter the target timetables presented by previous policies and recommendations.

Freedom and responsibility of the researcher

The policy for open scholarship applies in particular to the organisation's activities to support the freedom of researchers. The policy does not aim to influence what is being studied or how. The responsibility for the implementation of open scholarship lies both with individual researchers and research organisations, but the research organisations are responsible for providing services and incentives to support the implementation.

International framework

The policy for open scholarship does not follow international examples, but responsible evaluation and metrics, and recommendations concerning open government form a broader international framework for it.

Structure, implementation and monitoring of the policy

This policy includes the principles, objectives and actions of the culture of open scholarship. To support the policy for open scholarship, four recommendations, a self-evaluation tool for the culture of open scholarship and a national recommendation on the incentives for open science, business collaboration and citizen science will be published, which are intended to support the implementation and monitoring of strategic goals, objectives and actions. This way both the starting level and monitoring can be implemented as organisational self-assessment and as part of the national open science monitoring model. The timetable for the objectives of the culture of open scholarship of this policy is 2025, which does not replace the target timetables presented by previous policies and recommendations.

2. Policy for open scholarship

2.1. Definitions

- **Incentive:** incentives refer directly to the motivation of a work community or a researcher through appreciation, such as evaluation criteria, awards or honours.
- **Citizen science:** citizen science is scientific research conducted partly or entirely by amateur scientists. Citizen science can also serve official information. Amateur scientists can help with research in many ways. For example, they can collect, classify or analyse data needed for a study. In responsible citizen science, it is important that the people are not the subjects of the research but the authors of it. There is no need to be a trained scientist or citizen to participate in research. Citizen science can also be referred to as community science, crowd-sourced science or volunteer monitoring. Citizen science requirements:
 1. Amateur scientists are involved at least at one stage of the research.
 2. Amateur scientists are not the subjects of the research but the authors of it.
 3. Research must usually be led by a trained researcher.

The researcher must ensure that the amateur scientists are offered material in a sufficiently general language during and after the research.

- **Metadata:** metadata or descriptive information refers to the context, content and structure, management and/or processing of research data and information describing and summarising its compilation.
- **Service:** services are primarily understood as part of an operating environment where the organisation promotes and makes the culture of open scholarship possible.
- **RDI activities:** RDI activities refer to research, development and innovation activities. R&D activity reference: https://www.stat.fi/til/tkke/index_en.html and innovation activity reference: https://www.stat.fi/meta/kas/innovaatio_toim_en.html

- **Culture for open scholarship:** under the umbrella of open science, responsible research and teaching form the core of the culture for open scholarship, but this policy focuses on organisations and their courses of action. In other words, the culture of open scholarship refers to the open nature of the activities and processes of research organisations, and therefore, the guidelines do not direct the work of teaching and research staff directly. Instead, the policy focuses on how organisations support and enable different open science practices, and how organisations pay attention to (and possibly reward) the merits of teaching and research staff regarding open science. In this context, the culture of open scholarship also refers to the way organisations share teaching and research information, participate in social discussion and reciprocally interact with different actors in society, such as companies, decision-makers and citizens. The principle of open reciprocity is also an objective in the evaluation of research and a researcher.
- **Research data:** research data is material collected, detected, measured or created to confirm hypotheses and verify research results. Research data can usually be in digital format but also in analogue or physical format (e.g. laboratory journals).
- **Business collaboration:** business collaboration refers to collaboration between research organisations and companies for consideration or free of charge, which may vary from informal interaction to organised collaboration. Forms of collaboration include contract research, commissioned research, training and consulting. The collaboration can be funded by a public or private sector organisation.

2.2. Strategic principles

1. Responsibility is a precondition for openness.
2. Responsible openness requires reciprocity, which results in interaction that benefits all parties.
3. Transparency of the activities, services and incentives are prerequisites for the implementation of the culture for open scholarship.

2.3. Objectives and actions

The organisation must strive to achieve the objectives set out in this policy by 2025 at the latest.

1. Culture of open scholarship

The organisation has entrusted and scheduled the coordination, implementation and monitoring of open science services, open government's courses of action and sufficient support for the interaction of researchers with different actors in society.

Actions required by the objective:

- a. **Operating culture.** The organisation has the coordination, implementation and monitoring of open science services.

- b. **Open administration.** The organisation follows the [principles of open administration](#) in its activities.
- c. **Interaction.** The organisation invests in communication, legal and IT services and courses of action that promote social interaction.

2. Responsible evaluation

To support responsible evaluation, the organisation has at its disposal a knowledge base, criteria and practices that enable incentives that promote open science and the culture of open scholarship as part of the evaluation and merits of the members of the Finnish research community.

Actions required by the objective:

- a. **Responsible practices.** The organisation ensures that the evaluation of research and a researcher follows the responsible and transparent practices in accordance with the [Good practice in researcher evaluation](#) recommendation.
- b. **Incentives.** The organisation ensures that the evaluation of research and a researcher takes into account the outputs, activities and impacts in a broad and versatile manner as well as the activities to promote open science.
- c. **Knowledge base.** The organisation enables and ensures that the evaluations are supported by a versatile, comprehensive and comparable knowledge base that takes into account the considerations of open science.
- d. **Qualitative evaluation support.** The organisation enables the production and utilisation of qualitative information, such as narrative and case descriptions of quality and research impact, in evaluations.
- e. **Transparency and monitoring.** The organisation ensures that the evaluations are conducted in an open and transparent manner and that the implementation of responsible evaluation is monitored in all evaluation processes from the organisational level to the individual level.
- f. **Local support.** The organisation ensures that all parties of the evaluation have adequate guidance, guidelines and resources for responsible evaluation.
- g. **Responsible party.** The organisation determines a responsible party that researchers can contact should there be shortcomings in the responsibility of the evaluation.

3. Business collaboration

The organisation promotes openness in research conducted in business collaboration by providing researchers with adequate and appropriate support and training.

Actions required by the objective:

- a. **Awareness.** The organisation increases its awareness of the starting points, methods and preconditions of open science in research conducted in business collaboration.

- b. **Guidelines.** The organisation offers researchers clear guidelines for promoting openness in business projects.
- c. **Utilisation.** The organisation discusses the utilisation and sharing of results and material with the business partner at the beginning of the project.
- d. **Agreement.** The organisation concludes necessary agreements with the business partner in a transparent manner whenever possible.
- e. **Support services.** The support services provided by the organisation have sufficient competence to take into account openness and the special features of business projects as part of the agreement process.
- f. **Publication and communication plan.** The organisation will draw up a publication and communication plan, when feasible, to promote openness in the early stages of the business project.
- g. **Training.** The organisation takes into account business projects in their advanced data and publication training: how research results, data and material from business collaboration can be utilised and/or disseminated safely, efficiently and as openly as possible taking the interests of different parties into account.
- h. **Responsible conduct of research.** The organisation ensures that researchers representing the organisation take care of the implementation of responsible conduct of research in business projects.
- i. **Data protection.** The organisation pays particular attention to data protection and information security: lawful and responsible processing of confidential and/or secret information containing personal data or information about the activities of the company is a prerequisite for collaboration between the company and the research organisation.

4. Citizen science

The organisation promotes the operational preconditions for citizen science by providing sufficient and appropriate support and training to the involved researchers and other parties.

Actions required by the objective:

- a. **Raising awareness.** The organisation increases its awareness of the starting points, methods and preconditions of open science in research conducted by means of citizen science.
- b. **Guidelines.** The organisation offers researchers clear guidelines for citizen science projects.
- c. **Training.** The organisation takes into account citizen science in their advanced data and publication training: how data and results can be disseminated safely taking into account, for example, privacy protection.
- d. **Data management.** The organisation supports the preparation of a data management plan in citizen science projects.

- e. **Communication.** The organisation supports the researcher in publishing and communicating in a clear enough language in accordance with the principles of citizen science.
- f. **Publication and communication plan.** The organisation guides the researcher to draw up, when feasible, a publication and communication plan in the early stages of the citizen science project.
- g. **Responsible conduct of research.** The organisation ensures that the researcher leading a citizen science project takes care of the implementation of responsible conduct of research.
- h. **Systems.** The organisation ensures that the systems supporting citizen science projects are brought to an adequate level.

5. Education

The organisation promotes the culture of open education by providing up-to-date services to ensure that all persons providing education have equal opportunities to organise open education and to prepare and publish open educational resources regardless of the organisation, field of education or career stage.

Actions required by the objective:

- a. **Competence requirements for open education.** The organisation recommends that persons providing education acquire the competence to use open educational resources in accordance with the national competence requirements for open education.
- b. **Training for teachers.** The organisation ensures that the persons providing education have the opportunity to acquire the competence to use and author open educational resources in accordance with the national competence requirements for open education.
- c. **Copyright and agreements.** The organisation requires respect for copyright in the organisation of open education and in the preparation and production of open educational resources and provides support for copyright issues.
- d. **Licenses.** The organisation has a recommendation and support on licensing issues related to open education and educational resources.
- e. **Resource findability.** The organisation recommends that the authors of open educational resources make the metadata of the educational resources available in the Library of Open Educational Resources as comprehensively as possible.
- f. **Resource accessibility.** The organisation ensures that the provided open education and open educational resources comply with the national accessibility criteria.
- g. **Communication.** The organisation ensures that their communication channels feature communication related to open education.

- h. **E-education tools.** The organisation ensures that persons providing education have access to e-education tools that enable making the education open and to support for using them.
- i. **Quality criteria and editorial support.** The organisation provides support for developing the quality of open education and open educational resources. The organisation recommends that teachers act as mentors and peer reviewers to each other in quality issues related to open education and educational materials.
- j. **Development of the Library of Open Educational Resources.** The organisation actively participates in the development of the Library of Open Educational Resources through national cooperation.

6. Research data

The organisation promotes the culture of open research data by providing up-to-date services to ensure that all researchers have equal access to submit at least the metadata of the research and, when feasible, all research data and methods for reuse regardless of the organisation, field of research, funding base or career stage. With its up-to-date services, the organisation promotes the use of both its own and the existing national and international research data services.

Actions required by the objective:

- a. **Research data lifecycle management services.** The organisation offers researchers and students support, training and service for all stages of the data lifecycle.
- b. **Local support for research data management.** The organisation provides local support for data management at all stages of the data lifecycle and enables researchers and support service experts to specialise as research field specific local support.
- c. **Training.** Data management training is available in the organisation. Researchers, teachers, instructors, students and support service experts are encouraged to participate in data management training.
- d. **Research data management plans.** The organisation requires and supports research projects to create and maintain a research data management plan.
- e. **Immaterial and agreement services.** The organisation has an intellectual property, agreement and permit process to support data management in research projects.
- f. **Data protection and information security services.** In order to ensure data protection, the organisation has arranged support services, training and secure data collection, processing and storage infrastructure services.
- g. **Persistent identifiers.** The organisation assists researchers in obtaining persistent identifiers for (meta)data and methods.

- h. **Publication of research data.** The organisation collects and maintains a comprehensive open database of research data information with persistent identifiers, produced by researchers, i.e. metadata linked to research material, methods and research publications, if the nature of the data makes it possible.

7. Publications

The organisation promotes the culture of open publication by providing up-to-date services to ensure that all researchers and authors have equal opportunities to openly publish the results of their research and development work regardless of the organisation, field of research, funding base or career stage.

Actions required by the objective:

- a. **Monitoring and supporting openness.** The organisation monitors open publication and secures equal opportunities to open publication for all authors at every stage of their research careers.
- b. **Local support for open publication.** The organisation creates support services for open publication for researchers and authors either alone or in cooperation with other organisations.
- c. **Open access repository.** The organisation maintains an open access repository either alone or together with other organisations, and sufficient resources are reserved for its development.
- d. **Persistent identifiers.** The organisation ensures the use of persistent identifiers. The identifiers are integrated into the research information system and other systems.
- e. **Digital preservation.** The organisation takes care of digital preservation and long-term availability of publications and takes it into account in the planning of infrastructure, services and publication processes from the outset.
- f. **Use of open publications.** The organisation ensures that open publications are used in teaching, research, expert work and studies and that they are actively communicated to researchers, experts and teachers. The utilisation of open publications is monitored.
- g. **New open publication forms, practices and publishing platforms.** The organisation guides and supports researchers/authors in adopting up-to-date publishing practices that promote open publication and in familiarising themselves with and utilising new and progressive publishing platforms.
- h. **Open theses.** The organisation has a policy for open publication of theses and a platform for their publication.
- i. **Organisation's own publication production.** The organisation ensures that its own publication production is open and licensed under the CC licence.