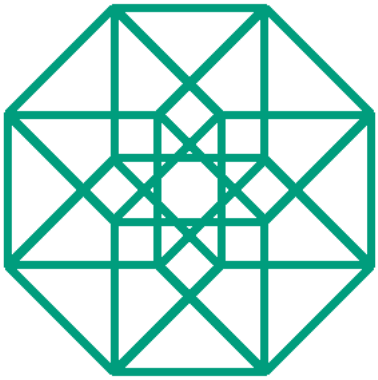


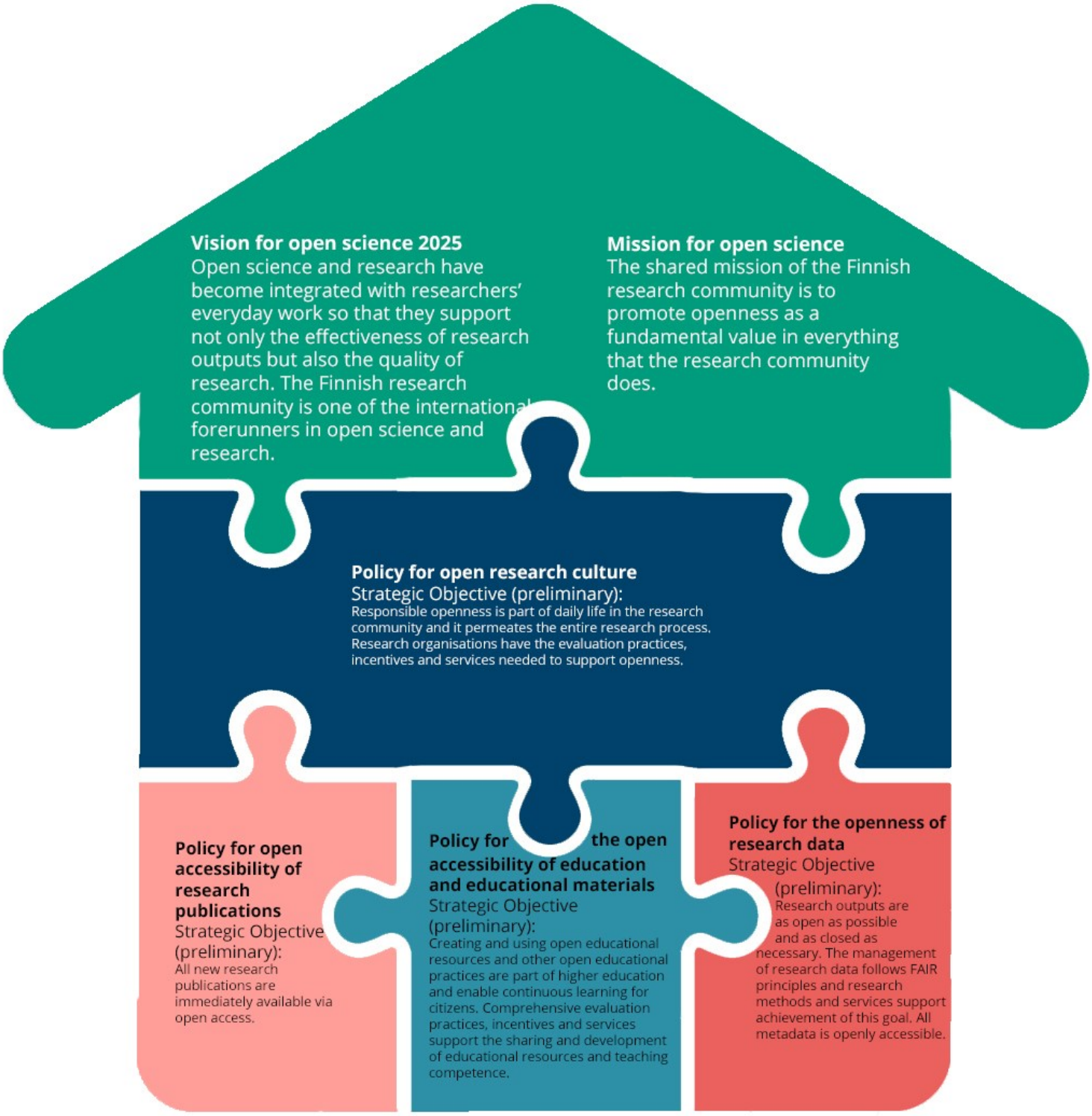
DRAFT 2.0

Declaration for Open Science in Finland 2020–2025

Content

Content 2
Summary 3
Declaration for Open Science in Finland 4
Preparation of the Open science policies by the Finnish research community 5
Why openness? 7
Why a joint declaration? 7
Background for the Declaration for Open Science in Finland 10
Appendices and further information 11

Summary



Open source material from Freepik.com was used to create this image.

Declaration for Open Science in Finland

Vision for open science 2025

Open science and research have become integrated with researchers' everyday work so that they support not only the effectiveness of research outputs but also the quality of research. The Finnish research community is one of the international forerunners in open science and research.

Mission for open science

The shared mission of the Finnish research community is to promote openness as a fundamental value in everything that the research community does. Openness promotes both societal knowledgebase and innovation by improving the quality of scientific and artistic research outputs and the educational resources based on them, and the fluid mobility and impact of research outputs in all of society:

- between researchers and research teams
- between fields of science and research
- between research and education
- between researchers and the private sector, the public sector and the third sector
- between researchers and society's decision-makers and citizens.

The Finnish research community will draft policies to support the vision and the mission. The policies will be drafted for four areas of openness:

- Culture for Open Scholarship
- Open Access to scholarly publications
- Open access of research data and infrastructures
- Open education and open access to educational resources.

By signing the Finnish Declaration for Open Science and Research 2020–2025 the members of the research community commit to promoting the openness of scientific and artistic research. To carry out the mission and achieve the vision, the signatories will:

1) promote the open science and research policies defined by the research community[1] as a part of their own strategy and steering work, taking into account the characteristics and specific resources of their organisations

2) support and encourage the everyday work of their organisation's members to attain the objectives and goals of the policies.

3) actively contribute to co-operation in promoting open science on a national level.

[1] The preliminary strategic goals for the four areas/policies are listed on page 3 of this declaration. The research community will define the final form of the goals during 2020. The final goals will not substantially or materially differ from the preliminary strategic goals listed on page 3.

Preparation of the Open science policies by the Finnish research community

To promote open science, the Finnish research community will jointly create strategic policies for the four areas of openness in 2020–2022. The special characteristics of different research fields and organisations will be taken into account in the preparation of these policies. The policies define goals and actions needed to attain them. International examples and practices will be used in the preparation of the policies.

In the policy process, the four expert panels of open science will bring together the expertise of the research community and draw up draft policies through broad-based co-operation. Each Expert Panel has also convened a policy working group using an open invitation procedure.

The policy drafts will be discussed by the National Steering Group of Open Science and then made available to the research community for comments. Based on the comments either a new draft for further comments or a final policy version will then be created. Each policy will be approved by the National Steering Group for Open Science.

The Federation of Finnish Learned Societies (TSV) will communicate with the research community about the policy process in co-operation with the research organisations. TSV will also publish the policies. A plan for the updating of policies will be included with each policy.

The declaration lists the preliminary goals drawn up by the Expert Panels for each policy by September 2019. The final goals will be confirmed during 2020. The final objectives will not significantly differ from those listed below. In addition to a finalised strategic goals, each of the four policy documents will include a limited number of strategic principles and objectives, and an action plan to attain these objectives. The four policy documents will be completed in 2020–22.

Preliminary goals in each area

Policy for open research culture
Strategic Objective (preliminary)

Responsible openness is part of daily life in the research community and it permeates the entire research process. Research organisations have the evaluation practices, incentives and services needed to support openness.

Policy for open accessibility of research publications
Strategic Objective (preliminary)

All new research publications are immediately available via open access.

Policy for the openness of research data, methods and infrastructure
Strategic Objective (preliminary)

Research outputs are as open as possible and as closed as necessary. The management of research data follows FAIR principles and research methods and services support achievement of this goal. All metadata is openly accessible.

Policy for the open accessibility of education and educational materials
Strategic Objective (preliminary)

Creating and using open educational resources and other open educational practices are part of higher education and enable continuous learning for citizens. Comprehensive evaluation practices, incentives and services support the sharing and development of educational resources and teaching competence.

Why openness?

Openness is a basic value in science and research. With openness, the effectiveness of research can be improved in the research community and society at large.

When research is open, research outputs, data, methods and infrastructures can be used more widely in the research community and society, and the effectiveness and mobility of research-based knowledge is increased. This in turn promotes societal knowledgebase and the creation of innovations. The quality of research will also improve in response to the openness of research outputs (observations, results, data and methods) and the transparency of the research process.

By providing equal access to research-based knowledge, openness also significantly increases equality in the research community and society at large. Openness has an important role in all stages of research. Using the new opportunities provided by openness is part of a researcher's toolkit.

Why a joint declaration?

The goal of the declaration of openness is to support and highlight openness as a fundamental value of research and the intrinsic autonomy of research. Clear principles and practices that promote openness provide a space where science and research can remain independent and widely connected with other areas of society, influencing them and being influenced by them. When open practices take root in research, openness will become part of good and responsible research and scientific practice.

Finnish research community

The Finnish research community consists of:

- individual Finnish and foreign researchers and doctoral students affiliated with Finnish research organisations, and researchers with personal funding affiliated with Finnish research organisations or funded by a Finnish research funder;
- Finnish research organisations such as universities, universities of applied sciences and research institutions, including their research teams and individual researchers, as defined in the Finnish legislation;
- Finnish research funders that specialise in funding research, including the Academy of Finland, Business Finland, and numerous private foundations and funds;
- Finnish service providers, especially CSC, that develop the infrastructure of open science;
- learned societies in Finland;
- Academies in Finland;
- learned libraries and archives in Finland
- scientific publishers in Finland.

The declaration of open science of the Finnish research community will lead the way for the Finnish research community to promote openness. By adopting the declaration of open science and research, the members of the Finnish research community commit to promoting common goals in their own organisations and to participate in the national open science coordination hosted by the Federation of Finnish Learned Societies (TSV). In other words, the research community has executive responsibility while the TSV has coordinating responsibility.

In addition to the Finnish research community defined above, private companies and third-sector organisations and citizens within the framework of citizen science also engage in research. Increasing openness in this context should also be encouraged especially when the research is conducted in co-operation with members of the research community.

Change in the operating culture

In general, the promotion of open science both means and requires a significant change in the culture of the research community. Above all, the change in culture will require:

- the research community to jointly define and decide on an objective and common goals to further the openness of research;
- responsible evaluation practices that are jointly agreed and adopted to comprehensively consider work for openness in all areas of research as a merit;
- a shared willingness to achieve a stronger sense of community and greater transparency at all stages and levels of the research process;
- offering support to researchers and research on a pragmatic level to attain openness in a responsible and equal manner;
- trust between the members of the research community; and
- transparency and clarity of common ways of working.

The change in culture is necessary in order to attain the objectives and goals of the research community's policies. This declaration lays out common practices that support the research community's transformation to promote responsible openness. A change in culture is a demanding process into which the community must invest time and resources.

Internationality

In Europe, national policies of open science and research have been drawn up in recent years in the Netherlands, France and Ireland. These countries have comprehensive plans covering and joining various areas of open science and research. In addition, there are further national policies and strategies that concern specific areas such as publications and research data.

The Finnish declaration for open science is also the Finnish research community's response to the international policies of open science that bind Finland as an EU Member State and its research community in various international contexts. Principal international policies include:

- EOSC declaration and FAIR principles

- EU Commission: EU Member States in Transition to Open Science (25 April 2018)
- Open Science Policy Platform Recommendations (22 April 2018)
- Amsterdam Call for Action (4–5 April 2016)
- Open Access 2020
- PlanS
- Dora declaration
- Leiden Manifesto for Research Metrics

Background for the Declaration for Open Science in Finland

Open science and research has been promoted in Finland for many years through diverse projects and recommendations. In recent years open science and research has been promoted by the Ministry of Education and Culture's projects Tutkimuksen tietoaineistot (TTA 2011–2013), Avoin tiede ja tutkimus (ATT 2014–2017) and Avoimen tieteen ja Datan hanke (ATD 2017–2018). Thanks to these projects and other initiatives, Finland has a broad basis for co-operation in open science and research and a substantial service infrastructure that enables openness. Roadmaps and goals created during earlier projects have contributed to the drawing up the Declaration for Open Science in Finland.

When the above mentioned projects were completed, the Ministry of Education and Culture transferred the coordination of open science to the research community itself. The coordination responsibility was assigned to the Federation of Finnish Learned Societies in 2018. The Ministry supports the coordination work but does not steer its content.

Consequently, this declaration has been drawn up collaboratively and is owned by the research community. The following national Open Science Steering Group organisations and their selected representatives have contributed to the work:

- Rectors' Conference of Finnish Universities of Applied Sciences Arene
- Finnish National Library
- Academy of Finland
- Universities Finland UNIFI
- Joint university library network FUN
- Federation of Finnish Learned Societies
- Finnish Social Science Data Archive
- National Research Consortium Tulanet

Appendices and further information

European Commission: Open Science Policy Recommendations (22.4.2018)
http://ec.europa.eu/research/openscience/pdf/integrated_advice_opspp_recommendations.pdf#view=fit&pagemode=none

EU Commission: EU Member States in Transition to Open Science (25.4.2018)
https://www.eosc-portal.eu/sites/default/files/CELEX_32018H0790_EN_TXT.pdf

Turning FAIR into reality (26.11.2018)
https://ec.europa.eu/info/publications/turning-fair-reality_en

EOSC Vienna Declaration (23.11.2018) https://eosc-launch.eu/declaration/

Amsterdam call of action (4–5.4.2016)
https://www.government.nl/documents/reports/2016/04/04/amsterdam-call-for-action-on-open-science

Kohti yllättäviä löytöjä ja luovia oivalluksia - Avoin tiede ja tutkimus -hankkeen loppuraportti
https://avointiede.fi/sites/avointiede.fi/files/ATT-hankkeen%20loppuraportti%20v5_0.pdf

Tutkimuksen avoimuudella yllättäviä löytöjä ja luovaa oivaltamista: Avoimen tieteen ja tutkimuksen tiekartta 2014–2017 http://urn.fi/URN:ISBN:978-952-263-317-0

Open Access 2020 https://oa2020.org

Plan S https://www.coalition-s.org/

Dora declaration https://sfdora.org

Leiden Manifesto for research metrics http://www.leidenmanifesto.org/

National Plan Open Science (Dutch) https://www.openscience.nl/en/national-platform-open-science/national-plan-open-science

France's National Plan for Open Science:
https://libereurope.eu/blog/2018/07/05/frenchopenscienceplan/

National Framework on the Transition to an Open Research Environment http://norf-ireland.net/