

NATIONAL OPEN ACCESS POLICY OF ETHIOPIA FOR HIGHER EDUCATION

1. Aims and Scope of the Policy

The Federal Democratic Republic of Ethiopia (FDRE) Ministry of Science and Higher Education is committed to supporting research of high quality and to ensuring that public research spending will lead to a maximum economic and social return. The FDRE Ministry of Science and Higher Education supports the principles of OPENNESS to research outputs and processes as integral to research excellence as well as the sharing and creation of new knowledge.

The policy applies to all research outputs authored/created, or co-authored/co-created, by employees of Ethiopian universities; this includes research outputs of graduate students and PhD students. It complements and does not override the Open Access requirements of research funders as they apply to their funded research.

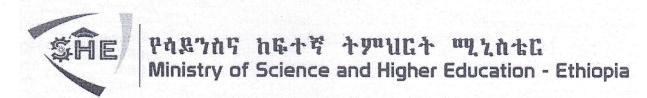
Researchers and research students have to make themselves visible and findable, using persistent identifiers such as ORCID IDs, and their outputs available on an Open Access basis, if their research resulting entirely or partly from public funding.

For this purpose, the FDRE Ministry of Science and Higher Education has defined the following policy which must be observed by all recipients of public research funding as of June 17,2019.

2. Rights, Roles and Responsibilities

- 1. The FDRE Ministry of Science and Higher Education supports the National Academic Digital Repository of Ethiopia (NADRE) as the aggregated national repository for publications, underlying research data that proof the validity of the related publication and open educational resources. Institutional repositories for publication and research data should be open for harvesting through NADRE.
- 2. The Universities will provide an Open Access service to inform and advise authors about their options and publishers' and funders' requirements, to administer any University funds available to pay for Gold Open Access and to manage to develop the institutional repository in support of Green Open Access.
- 3. Final peer reviewed manuscripts will be made available by the University Libraries in compliance with publishers' requirements.

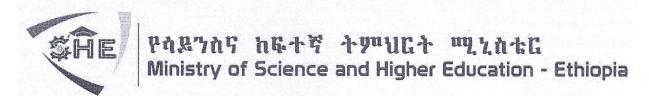




- 4. Universities will implement and support Institutional Repositories and respectively NADRE as the Open Access publishing platform for online journals which are created and managed by University departments or research centers.
- 5. Universities encourage the uptake of Open Science practices (in addition to open access to publications and data) such as the involvement in collaborative community science projects, the use of open educational resources etc. by including "openness" as one of the criteria during research assessment and evaluation.
- 6. Researchers manage research outputs in adherence with the principle and requirements expressed in this policy.

3. Open Access to Publications

- 1. The FDRE Ministry of Science and Higher Education requires that a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication of all peer reviewed publications produced as a result of research supported, either in entirety or in part by public funding, is deposited in the NADRE as well as in institutional repositories if available. Deposit should be made immediately upon acceptance for publication and made available under the FAIR principles (Findable, Accessible, Interoperable and Re-usable) especially for related metadata standard preferably using Dublin Core Schema and through the assignment of creative commons licenses preferably.
- 2. The guiding principle is: as open as possible, as closed as necessary. University Libraries require the full-text of all such publications immediately openly available where possible in any case no later than 6-months after publication in Science, Technology, Engineering and Mathematics (STEM) or 12 months after publication in the Social Sciences and Humanities (SSH). If a journal's permitted embargo period is longer than these, authors have to inform the University Library that at due time the published version could be made available. In any case the related metadata should always be made accessible
- 3. The Universities encourage their members to retain ownership of copyright and to license to publishers only those rights necessary for publication. This is possible through the use of addenda to the publishing contract. Templates are available at https://sparcopen.org/wp-content/uploads/2016/01/Access-Reuse_Addendum.pdf.
- 4. While the dominant type of scientific publication is the journal article, researchers are strongly encouraged to provide open access to other types of publications such as monographs, book chapters, conference proceedings, grey literature, reports, multimedia, etc.



4. Open Access to Theses and Dissertations

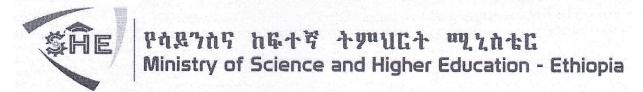
- 1. The Universities require an approved final version of the thesis or dissertation deposited in the NADRE directly or University's institutional repository and must include acknowledgement of the funding organization.
- 2. This policy applies to all post-graduate students who author a thesis or dissertation as part of their University graduate degree requirements and following issuance of this policy.
- 3. To assist the Universities in archiving and openly disseminating theses and dissertations within the scope of this policy, all of the University graduate students have to submit the final version of their thesis or dissertation to the respective University Library before conferral of the student's graduate degree, regardless of whether an embargo is obtained. Such thesis or dissertation will be made freely and openly available to the public after filing, unless the graduate student obtains an embargo.
- 4. Post-graduate students may delay the date their theses or dissertations become available in an open access repository by specifying the embargo period up to two years upon filing. Upon compelling circumstances, the University may grant embargoes of longer than two years.

5. Open Access to Research Data

- 1. The Universities require the deposit of the research data and metadata supporting publications resulting entirely or partly from public funding in the institutional research data repository respectively in the NADRE.
- 2. The FDRE Ministry of Science and Higher Education follows the principle "as open as possible as closed as necessary". The FDRE Ministry of Science and Higher Education insists research data to be handled according to the FAIR principles. If data cannot be open due to legal, privacy or other concerns (for example personal or sensitive data) this should be clearly explained by Authors.
- 3. Researchers receiving public funding have to submit their Data Management Plans (DMP) to research offices and to be approved by University Libraries showing how data will be handled according to the FAIR data principles. Data management plan should be, if possible, machine actionable.

6. Licensing





- 1. The Universities require the application of appropriate licenses to all kinds of research outputs, including software, arising from public funds in order to specify access and usage rights that are consistent with this policy.
- 2. Open Access publications must be accompanied by open licenses, the Creative Commons License for documents and data preferably Creative Commons Attribution License (CC BY), Creative commons Attribution Share Alike License (CC BY-SA) or Creative Commons Attribution Non Commercial (CC BY-NC) and the Apache 2.0 License for software. Licensing terms should not unduly restrict text and data mining, in accordance with and without prejudice to applicable copyright legislation.

7. Resources for Training / Awareness-raising on Open Science

Universities have to ensure that researchers and post-graduate students working on their thesis have access to appropriate training and support activities on Open Science on their institutional level.

8. Policy Review

An evidenced-based review of the policy implementation will take place three years following its adoption and subsequent reviews will take place on biennial basis.

Prof. Hirut Woldemariam

Minister of Science and Higher Education

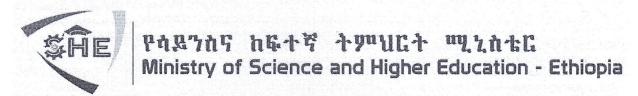
June 2019.

Hirut WiMariam Teketel

ANNEX I: Definitions

- Creative Commons License: Recognizes the author's copyright authority, but allows others to copy and distribute the work, provided they give the author credit and only on the specified conditions.
- Creative Commons Attribution License (CC BY) refers to creative commons license where Licensees may copy, distribute, display and perform the work and make derivative works and remixes based on it only if they give the author or licensor the credits (attribution) in the manner specified by these. Details are available at https://creativecommons.org/licenses/by/4.0/legalcode.
- Creative commons Attribution Share Alike License (CC BY-SA) refers to creative commons license where Licensees may copy, distribute, display and perform the work and make derivative works and remixes based on it only if they give the author or licensor the credits (attribution) in the manner specified by these. If users remix, transform, or build upon the material, they must distribute their contributions under the same license as the original. Details are available at https://creativecommons.org/licenses/by-sa/4.0/legalcode.
- Creative commons Attribution Non Commercial (CC BY-NC) refers to creative commons license where Licensees may copy, distribute, display and perform the work and make derivative works and remixes based on it only if they give the author or licensor the credits (attribution) in the manner specified by these. The use the material for commercial purposes is not allowed. Details are available at https://creativecommons.org/licenses/by-nc/4.0/legalcode.
- Data Management Plan (DMP) is a brief plan that defines how the data will be created, how it will be documented, who will be able to access it, where it will be stored, who will back it up and whether (and how) it will be shared and preserved.
- **Dublin Core Schema** is a small set of vocabulary termsthat can be used to describe digital resources as well as physical resources such as books or CDs, and objects like artworks. The full set of Dublin Core metadata terms can be found on the Dublin Core Metadata Initiative (DCMI) website, http://dublincore.org/
- **Embargo** is the period during which a publication can be 'closed' while deposited in the repository (i.e. the publication is not openly available).
- FAIR Data Principles for scientific management and data stewardship refer to a set of principles to make data Findable, Accessible, Interoperable and Reusable https://www.force11.org/group/fairgroup/fairprinciples.
- Gold Open Access: refers to the Gold route to open access and is delivered via publishing an article in a journal.
- Green Open Access: refers to the Green route to open access and is delivered via self-archiving (depositing) an output into a repository.
- Machine readable is in a form that can be used and understood by a computer.





- **Metadata:** are the descriptors used for describing, tracing, use and management of the deposited item (indicatively: title of publication, author(s), institutional affiliation, name of journal where the publication has been accepted, etc.).
- National Academic Digital Repository of Ethiopia (NADRE): is aggregated national repository for Ethiopia which is established to make open access to research works published by Ethiopian Universities and research intuitions.
- Open Access: refers to online, free of cost access to peer reviewed scientific content with limited copyright and licensing restrictions.
- Open Data: Open Data are online, free of cost, accessible data that can be used, reused and distributed provided that the data source is attributed and shared alike.
- Open dissemination/open-access repository: Scholarly articles stored and made available on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full-texts of the articles, crawl them for indexing, pass them as data to software, or use them for any other lawful, non-commercial purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the Internet by itself.
- Open Science: Open Science is the practice of science in such a way that others can collaborate and contribute, where research data, lab notes and other research processes are freely available, under terms that enable reuse, redistribution and reproduction of the research and its underlying data and methods.
- Open Educational Resources (OER) are teaching, learning and research materials in any medium digital or otherwise that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions.
- **ORCID** provides a persistent digital identifier that distinguishes a researcher from every other and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between researchers and their professional activities ensuring that their work is recognized.
- **Public Funding** is the money that is used by Ethiopian government to provide goods and services to the public in general.
- Research Data is any information that has been collected, observed, generated or created to validate original research findings (such as raw data captured from instruments sensors, visualizations, models, algorithms, images, audio and video files, etc.).
- **Research** is defined as any creative and systematically performed work with the goal of furthering knowledge.

