AUSTRiA

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS		●
National Laws on OS		●
National Funder Policies on OS	●	
National Data Repositories		●
Involved in INFRAEOSC 5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Austrian Federal Ministry of Education, Science and Research (BMBWF) (https://www.bmbwf.gv.at/en.html)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- The Austrian Federal Ministry of Education, Science and Research (BMBWF) will develop in 2021 a National Open Science Strategy for Austria.

- The **Open Science Network Austria (OANA) (https://oana.at/)** Working Group delivered in 2020 **Recommendations for a National Open Science Strategy (https://www.oana.at/arbeitsgruppen/ag-open-science-strategie/empfehlungen-fuer-eine-nationale-open-science-strategie-in-oesterreich/)** in the country.

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws regarding Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **FWF Open Access Policy: Open Access to Research Data – 2019 (https://www.fwf.ac.at/en/research-funding/open-access-policy/open-access-to-research-data/)**

Objectives:
- The policy expect FWF´s funded research data to be accessible in Open Access and FAIR.

NATIONAL DATA REPOSITORIES

Austria does not have national repositories but has multiples repositories at the institutional level.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **EOSC-Pillar (https://www.eosc-pillar.eu)**

Objectives:
- Facilitating the liaison with budding national initiatives for the coordination of data and open science services, which are at the heart of the project concept.
- Ensuring the complementarity of competences and expertise, while including the point of view of the key stakeholders represented in the national initiatives (namely involving key research communities alongside e-Infrastructures and data service providers).

FURTHER DETAILS

Information regarding Open Science in Austria can be found on **OANA – Open Science Network Austria (https://backend.univie.ac.at/index.php?id=67453&L=2)**.

BELGiUM

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity		●
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS	●	
National Funder Policies on OS	●	
National Data Repositories		●
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

- **Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique (https://www.academieroyale.be/)**

- **Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten (https://kvab.be/)**

- **Académie Royale de Médecine de Belgique** (https://www.armb.be/)

- **Koninklijke Academie voor Geneeskunde van België (https://www.academiegeneeskunde.be/)**

- **Belgian Federal Science Policy Office** (https://www.belspo.be/)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **Brussels Declaration on Open Access – 2012 (https://openaccessbelgium.files.wordpress.com/2012/11/signedbrussels-declaration-on-open-access.pdf)**

Objectives:

- To actively inform researchers about Open Access and advocate in favour of OA.
- To support the creation and maintenance of Open Access repositories.

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability	✖	
Discipline-related perspective		✖
Type of Mandate - Scope	**Declaration – OA SOFT**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

- **Belgian Copyright Law – Open Access clause – 2018 (http://www.ejustice.just.fgov.be/cgi/article.pl?urlimage=%2Fmopdf%2F2018%2F09%2F05_1.pdf%23Page81&calle%20r=summary&language=fr&pub_date=2018-09-05&numac=2018031589)**

Objectives:

- Research publications must be available in Open Access if publicly funded for at least 50%.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **BELSPO Open Research Data mandate – 2019 (http://www.belspo.be/belspo/openscience/doc/ORD_Policy_Dec2019.pdf)**

Objectives:

- Researchers are mandated to deposit data in certified and trusted online repositories and/or data centres.
- The principle "as open as possible, as closed as necessary" must be respected.

NATIONAL DATA REPOSITORIES

Belgium does not have national repositories but has **multiples repositories (https://openaccess.be/open-access-in-belgium/open-access-repositories/)** at the institutional level.

INFRAEOSC-5b CALL

The country takes currently part in two INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **FAIRsFAIR (https://www.fairsfair.eu/)**

Objectives:

- Development of global standards for FAIR certification of repositories.
- Provide a platform for using and implementing the FAIR principles in the day to day work of European research data providers and repositories.
- Deliver essential FAIR dimensions of the Rules of Participation (RoP) and regulatory compliance.

- **EOSC-Pillar (https://www.eosc-pillar.eu)**

Objectives:

- Facilitating the liaison with budding national initiatives for the coordination of data and open science services, which are at the heart of the project concept.
- Ensuring the complementarity of competences and expertise, while including the point of view of the key stakeholders represented in the national initiatives (namely involving key research communities alongside e-Infrastructures and data service providers).

FURTHER DETAILS

Information regarding Open Science in Belgium can be found on **Open Access Belgium (https://openaccess.be/open-access-in-belgium/)**.

BULGARiA

OVERVIEW	Yes	No
Active in Open Science	🔴	
Research Ethic & Integrity		🔴
Authorities responsible for OS	🔴	
National Policies on OS	🔴	
National Laws on OS		🔴
National Funder Policies on OS		🔴
National Data Repositories	🔴	
Involved in INFRAEOSC-5b call	🔴	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Education and Science (https://www.mon.bg/en/100000)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **National Plan for the Development of the Open Science Initiative in the Republic of Bulgaria – 2021 (https://www.mon.bg/upload/24848/plan-otvorena-nauka_130121.pdf)**

Objectives:

- The plan sets out the strategic goals, the necessary steps and tools for the transition to the transformation of open science into a standard practice for conducting research.

Responsibility aspect	Yes	No
Mention of FAIR	✖	
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science	✖	
Language availability		✖
Discipline-related perspective	✖	
Type of Mandate - Scope	**National Plan – OS SOFT**	

- **National Programme – Stimulation of publishing activity in authoritative international scientific journals and open access to scientific information – 2021 (https://bpos.bg/api/FilesStorage?key=32d6b70d-4780-4ea7-a22e-0e6a323c5d74&fileName=rMS733_NNP_Publikacii_27102021.pdf.pdf&dbId=1)**

Objectives:
- The programme is related to the sharing of scientific results in the Bulgarian Open Science Portal.

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability		✖
Discipline-related perspective		✖
Type of Mandate - Scope	National Programme – OS SOFT	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws regarding Open Science.

NATIONAL FUNDER POLICIES

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **BPOS – Bulgarian Portal for Open Science – 2020 (https://bpos.bg/)**

Level: National.

Details: Cross-disciplinary repository administrated by **NACID (https://nacid.bg/en/)**.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **NI4OS (https://ni4os.eu/)**

Objectives:
- Support the development and inclusion of the national Open Science Cloud initiatives in 15 Member States and Associated Countries in the EOSC governance.
- Instil within the community the EOSC philosophy and FAIR principles for data Findability, Accessibility, Interoperability and Reusability.
- Provide technical and policy support for on-boarding of service providers into EOSC, including generic services (compute, data storage, data management), thematic services, repositories and data sets.

FURTHER DETAILS

Information regarding Open Science in Bulgaria can be found on the **Bulgarian Portal for Open Science (https://bpos.bg/)**.

Acknowledgements

With the contribution of Teodora Konach from OeAWI

CROATiA

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS		●
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Science and Education (MSE) (https://mzo.gov.hr/en)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- The Croatian Rectors´ Conference announced its support to OA in the **Research assessment and promotion of OA to scientific information and research data – 2015** (http://www.rektorski-zbor.hr/fileadmin/rektorat/O_Sveucilistu/Tijela_sluzbe/Rektorski_zbor/dokumenti2/Vrednovanje_znanstvenog_rada_i_otvoreni_pristup_znanstvenim_informacijama_Rektorski_zbor.pdf).
- The **Strategy of Education, Science and Technology – 2014** (https://mzo.gov.hr/UserDocsImages/dokumenti/Obrazovanje/Strategy%20for%20Education,%20Science%20and%20Tehnology.pdf) recognises that an OA system for research data, publications and teaching resources would be a major improvement for the research environment.

- The **Croatian Research and Innovation Infrastructures Roadmap 2014-2020 (https://www.obzor2020.hr/userfiles/obzor2020/pdfs/Strategija_poticanja_inovacija_18_12_14.pdf)** promotes Open Access to scientific papers and research data, in particular when publicly funded.
- The **Croatian Act on Scientific Activity and Higher Education (https://www.zakon.hr/z/320/Zakon-o-znanstvenoj-djelatnosti-i-visokom-obrazovanju)** mandates higher education theses to be archived in academic library repositories.
- The **Croatian Open Access Declaration (https://www.fer.unizg.hr/oa2012/declaration)** was signed in 2012. It states that "results of the activities financed by public funds, especially in the field of education and science, should be made available in OA".

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **DABAR (Digital Academic Archives and Repositories) – 2015 (https://dabar.srce.hr/en)**

Level: National.

Details: More institutional and thematic repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **NI4OS (https://ni4os.eu/)**

Objectives:

- Support the development and inclusion of the national Open Science Cloud initiatives in 15 Member States and Associated Countries in the EOSC governance.

- Instil within the community the EOSC philosophy and FAIR principles for data Findability, Accessibility, Interoperability and Reusability.
- Provide technical and policy support for on-boarding of service providers into EOSC, including generic services (compute, data storage, data management), thematic services, repositories and data sets.

CYPRUS

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity		●
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories		●
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Deputy Ministry of Research, Innovation and Digital Policy (https://www.dmrid.gov.cy/dmrid/research.nsf/home_en/home_en?opendocument)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **National Policy of the Republic of Cyprus for Open Access to Scientific Information – 2016 (https://opensciencecy.ucy.ac.cy/wp-content/uploads/2019/09/FINAL-EN-National-Policy-for-Open-Access-to-Scientific-Information.pdf)**

Objectives:

- To create Open Access conditions (accessible to citizens, researchers, businesses) for all publications of research and academic institutions in the country, publicly or privately funded.

- To align the country´s Open Access legislation with the European policies (European Commission recommendation, Horizon 2020) and best practices.

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability	✖	
Discipline-related perspective		✖
Type of Mandate - Scope	**National Policy – OA SOFT**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

Cyprus does not have national repositories but has multiples repositories at the institutional level.

ROSiE

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **NI4OS (https://ni4os.eu/)**

Objectives:

- Support the development and inclusion of the national Open Science Cloud initiatives in 15 Member States and Associated Countries in the EOSC governance.
- Instil within the community the EOSC philosophy and FAIR principles for data Findability, Accessibility, Interoperability and Reusability.
- Provide technical and policy support for on-boarding of service providers into EOSC, including generic services (compute, data storage, data management), thematic services, repositories and data sets.

Acknowledgements

With the contribution of Dr. Panagiotis Kavouras from NTUA

CZECH REPUBLiC

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity		●
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories		●
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Governmental Office for Research, Development and Innovation (http://www.vyzkum.cz/)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **Action Plan for Implementation of the National Strategy on Open Access to Scientific Information of the Czech Republic for 2017-2020 – 2019 (https://www.vyzkum.cz/FrontClanek.aspx?idsekce=876326&ad=1&%E2%80%A6)**

Objectives:
- Defines concrete goals and methods to fulfil general ideas of the National Strategy.

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability		✖
Discipline-related perspective	N/A	N/A
Type of Mandate - Scope	Action Plan – OA SOFT	

- **National Strategy on Open Access to Scientific Information of the Czech Republic for 2017-2020 – 2017 (https://www.vyzkum.cz/FrontClanek.aspx?idsekce=876326&ad=1&%E2%80%A6)**

Objectives:
- Covers research publications and research data

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability		✖
Discipline-related perspective	N/A	N/A
Type of Mandate - Scope	State Plan – OA SOFT	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

Czech Republic does not have national repositories but has multiples repositories at the institutional level.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **EOSC-Synergy (https://www.eosc-synergy.eu/)**

Objectives:

- Expand EOSC capacity.
- Building EOSC capabilities.
- Foster EOSC services integration and promote quality.
- Promoting EOSC policy harmonisation.
- Develop the EOSC Human capital.

FURTHER DETAILS

Information regarding Open Access in Czech Republic can be found on **Open Access in the Czech Republic (https://openaccess.cz/en/open-access-in-the-czech-republic/)**.

DENMARK

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS	●	
National Funder Policies on OS	●	
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Higher Education and Science **(https://ufm.dk/en/the-ministry/organisation/the-ministry)**

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **Denmark´s National Strategy for Open Access – 2018 (https://ufm.dk/en/research-and-innovation/cooperation-between-research-and-innovation/open-access/Publications/denmarks-national-strategy-for-open-access/national-strategy-for-open-access-english.pdf)**

Objectives:

- To ensure unimpeded, digital access by 2025 for all to all peer-reviewed research publication from Danish research institutions – with a maximum delay of 12 months.

ROSiE

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability	✖	
Discipline-related perspective		✖
Type of Mandate - Scope	National Strategy – OA SOFT	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

- **Bekendtgørelse nr. 514 af 20. april 2020 om anmeldelse af forskningsdata skabt af statslige myndigheder – 2020 (https://www.retsinformation.dk/eli/lta/2020/514)**
- **Bekendtgørelse nr. 33 af 8. januar 2020 om bevaring og kassation af arkivalier i regionerne – 2020 (https://www.retsinformation.dk/eli/lta/2020/33)**
- **Bekendtgørelse nr. 183 af 26. januar 2018 om bevaring og kassation af digitalt skabte data og dokumenter fra kommunerne – 2018 (https://www.retsinformation.dk/eli/lta/2018/183)**

Objectives:

- All research data produced by public institutions, including universities must be notified to Rigsarkivet (the National Archive), and deposited if Rigsarkivet find that preservation of the data is necessary.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **Open Access-politik for offentlige forskningsfonde (Open Access policy for public research funders) – 2022 (https://ufm.dk/forskning-og-**

innovation/samspil-mellem-viden-og-innovation/open-access/artikler/open-access-i-rad-og-fonde/open-access-politik-for-offentlige-forskningsfonde)

Objectives:

- Accession to the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities.
- To make Open Access standard for all journal publications.

NATIONAL DATA REPOSITORIES

- **The Danish National Archives (Rigsarkivet) – 2014 (https://www.sa.dk/en/)**

Level: National.

Details: All research data produced by public institutions, including universities must be notified to Rigsarkivet (the National Archive), and deposited if Rigsarkivet find that preservation of the data is necessary. Research data from private entities can be deposited voluntarily. The repository incorporates the previously existing Dansk Data Arkiv (1973-1993).

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **EOSC-Nordic (https://eosc-nordic.eu/)**

Objectives:

- EOSC-Nordic aims to facilitate the alignment of the delivery of horizontal services by improving interoperability practices across the national initiatives.
- This will include identifying and engaging with prospective service providers and supporting their integration with the EOSC catalogue, service management framework and operational environment.
- EOSC-Nordic will work in close collaboration with FAIRsFAIR and other relevant initiatives (such as GoFAIR) on data management to promote best practices and support the adoption of relevant certification schemas.
- The project will demonstrate the potential of EOSC by piloting innovative solutions, designed to support cross border research collaboration, using the Nordic and Baltic countries as a testbed environment.
- EOSC-Nordic will consolidate and expand a distributed network of experts and service operators at local and national levels.

Acknowledgements

With the contribution of Dr. Soren Holm from UiO

ESTONiA

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS		●
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories		●
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Education and Research (https://www.hm.ee/en)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- The new **Organisation of Research and Development Act (https://www.hm.ee/et/taks)** is currently under development in the Ministry of Education and Research, with the estimated date of approval in the first quarter of 2023. The working group includes a subgroup on Open Science that has produced a draft version of the national framework for Open Science.
- The **Estonian Research, Development, Innovation and Entrepreneurship Strategy 2021–2035 (https://www.hm.ee/en/activities/strategic-planning-2021-2035)** has been produced by the Ministry of Education and Research and the Ministry of Economic Affairs and Communications. It is supposed to include an annex on the principles of Open Science, currently under development.
- The Estonian **Code of Conduct for Research Integrity – 2017 (https://www.eetika.ee/sites/default/files/www_ut/hea_teadustava_eng_trukis.pdf)**

postulates openness as one of the fundamental values in research and describes its manifestations at different stages of research; Open Access is also mentioned.

- The **Implementation Plan 2016-2019 for achieving the objectives of the Estonian Research and Development and Innovation Strategy 2014-2020 "Knowledge-based Estonia" (https://www.hm.ee/sites/default/files/tai_rakendusplaan_2016-2020-ennewtextpdf.pdf)** was adopted by the Estonian government in 2016. Its priority number 5 addresses and promote Open Access.
- An Open Science Expert Group was established in 2015 by the Estonian Research Council in order to draft a national Open Science policy. Their report **Open Science in Estonia – Open Science Expert Group of the Estonian Research Council, Principles and Recommendations for Developing National Policies (https://www.etag.ee/wp-content/uploads/2017/03/Open-Science-in-Estonia-Principles-and-Recommendations-final.pdf)** were published in 2016.

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws regarding Open Science or Open Access.

NATIONAL FUNDER POLICIES

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

Estonia does not have national repositories but has multiples repositories at the institutional level.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **EOSC-Nordic (https://eosc-nordic.eu/)**

Objectives:

- EOSC-Nordic aims to facilitate the alignment of the delivery of horizontal services by improving interoperability practices across the national initiatives.
- This will include identifying and engaging with prospective service providers and supporting their integration with the EOSC catalogue, service management framework and operational environment.

- EOSC-Nordic will work in close collaboration with FAIRsFAIR and other relevant initiatives (such as GoFAIR) on data management to promote best practices and support the adoption of relevant certification schemas.
- The project will demonstrate the potential of EOSC by piloting innovative solutions, designed to support cross border research collaboration, using the Nordic and Baltic countries as a testbed environment.
- EOSC-Nordic will consolidate and expand a distributed network of experts and service operators at local and national levels.

Acknowledgements

With the contribution of Dr. Kadri Simm & Jaana Eigi-Watkin from UT

FiNLAND

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS	●	
National Funder Policies on OS	●	
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Education and Culture (https://okm.fi/en/ministry#:~:text=The%20Ministry%20of%20Education%20and%20Culture%20is%20one,Government%20by%20planning%2C%20outlining%20and%20implementing%20its%20policies.)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **Open research data and methods. National policy and executive plan by the higher education and research community for 2021–2025 – 2021 (https://avointiede.fi/sites/default/files/2021-05/Open%20research%20data%20and%20methods%2C%20policy%20component%201.pdf)**

Objectives:

- Research data and methods are as open as possible and as closed as necessary. The data is managed appropriately with the aim of implementing the FAIR principles. Research methods and research data are identified as independent research outputs.

ROSiE

Responsibility aspect	Yes	No
Mention of FAIR	✖	
Mention of RE/RI	✖	
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability	✖	
Discipline-related perspective	✖	
Type of Mandate - Scope	**National Policy – OA HARD**	

- **Open education and educational resources. National policy and executive plan by the higher education and research community for 2021-2025 – 2020 (https://avointiede.fi/sites/default/files/2020-12/final-version%20eng%20oppimislinjaus%201.pdf)**

Objectives:

- Creating, using and joint development of open educational resources and other open educational practices are part of daily work in higher education and enable continuous learning.

ROSiE

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability	✖	
Discipline-related perspective	✖	
Type of Mandate - Scope	**National Policy – OA HARD**	

- **Open access to scholarly publications. National Policy and executive plan by the research community in Finland for 2020–2025 – 2019 (https://avointiede.fi/sites/default/files/2020-03/openaccess2019.pdf)**

Objectives:

- No later than 2022, all new scientific articles and conference publications will be immediately openly accessible.

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability	✖	
Discipline-related perspective		✖
Type of Mandate - Scope	**National Policy – OA SOFT**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

- **Laki julkisin varoin tuotettujen tutkimusaineistojen uudelleenkäytöstä – 2021 (https://www.finlex.fi/fi/laki/alkup/2021/20210713)**

Objectives:

- The law for the reuse of research material produced with public funds (based on EU directive of open data 1024/2019/EU) states that the publisher of research materials in question must allow their use for commercial or non-commercial purposes free of charge.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **Academy of Finland – Policies on Open Science (https://www.aka.fi/en/research-funding/responsible-science/open-science/academy-policies-on-open-science/)**

Objectives:

- The Academy of Finland´s main objectives regarding Open Science can be find **here (https://www.aka.fi/en/research-funding/responsible-science/open-science/our-science-policy-objectives/)**.

NATIONAL DATA REPOSITORIES

- **Fairdata.fi – 2021 (https://www.fairdata.fi/en/)**

Level: National.

Details: Repository from the Ministry of Education and Culture. More repositories exist.

- **Research.fi – 2020 (https://research.fi/en/)**

Level: National.

Details: Repository from the Ministry of Education and Culture. More repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in two INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **FAIRsFAIR (https://www.fairsfair.eu/)**

Objectives:

- Development of global standards for FAIR certification of repositories.
- Provide a platform for using and implementing the FAIR principles in the day to day work of European research data providers and repositories.
- Deliver essential FAIR dimensions of the Rules of Participation (RoP) and regulatory compliance.

- **EOSC-Nordic (https://eosc-nordic.eu/)**

Objectives:

- EOSC-Nordic aims to facilitate the alignment of the delivery of horizontal services by improving interoperability practices across the national initiatives.
- This will include identifying and engaging with prospective service providers and supporting their integration with the EOSC catalogue, service management framework and operational environment.
- EOSC-Nordic will work in close collaboration with FAIRsFAIR and other relevant initiatives (such as GoFAIR) on data management to promote best practices and support the adoption of relevant certification schemas.
- The project will demonstrate the potential of EOSC by piloting innovative solutions, designed to support cross border research collaboration, using the Nordic and Baltic countries as a testbed environment.

- EOSC-Nordic will consolidate and expand a distributed network of experts and service operators at local and national levels.

FURTHER DETAILS

Information regarding Open Science in Finland can be found on **Open Science (https://avointiede.fi/en)**.

Acknowledgements

With the contribution of Dr. Henriikka Mustajoki & Elina Koivisto from TSV

FRANCE

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Bodies involved in OS	●	
National Policies on OS	●	
National Laws on OS	●	
National Funder Policies on OS	●	
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

BODIES INVOLVED IN OPEN SCIENCE & ACCESS

Ministère de l´Enseignement Supérieur, de la Recherche et de l´Innovation (https://www.enseignementsup-recherche.gouv.fr/fr)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **Second National Plan for Open Science 2021–2024 – 2021 (https://www.ouvrirlascience.fr/deuxieme-plan-national-pour-la-science-ouverte/)**

Objectives:

- Generalise open access to publications.
- Structuring, sharing and opening up research data.
- Opening up and promoting source code produced by research.
- Transforming practices to make open science the default principle.

Responsibility aspect	Yes	No
Mention of FAIR	✖	
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science	✖	
Language availability	✖	
Discipline-related perspective	✖	
Type of Mandate - Scope	**National Plan – OS HARD**	

- **First National Plan for Open Science – 2018 (https://www.ouvrirlascience.fr/plan-national-pour-la-science-ouverte/)**

Objectives:

- Generalise open access to publications.
- Structure research data and make it available through open access.
- Be part of a sustainable European and international open science dynamic.

Responsibility aspect	Yes	No
Mention of FAIR	✖	
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science	✖	
Language availability	✖	
Discipline-related perspective	✖	
Type of Mandate - Scope	**National Plan – OS HARD**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

- **Law for a Digital Republic – 2016 (https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000033202746?r=XZnej8B7xU)**

Objectives:
- Unleashing innovation by circulating information and knowledge to prepare France in the fact of global challenges of the data economy.
- Create a clear framework of trust, guaranteeing users´ rights and protecting personal data.
- Build an open and inclusive digital Republic, so that opportunities related to the digital transition benefit as many people as possible.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **ANR Open Science Policy – 2013 (https://anr.fr/en/anrs-role-in-research/values-and-commitments/open-science/)**

Objectives:

- Promote open access to publications (scientific publications – full text – must be submitted to an open archive (national HAL or local institutional archives).
- Contribute to open research data wherever possible (DMPs required for funded projects since 2019).
- This policy fully aligns with the Second National Plan for Open Science 2021–2024 – 2021.

NATIONAL DATA REPOSITORIES

- **HAL Open Science – 2001 (https://hal.archives-ouvertes.fr/?lang=en)**

Level: National.

Details: More repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in three INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **ExPaNDS (https://expands.eu/)**

Objectives:

- Enable EOSC services and to provide coherent FAIR data services to the scientific users of national Photon and Neutron sources.
- Connect national PaN RIs through a platform of data analysis as a service for users from research institutes universities, industry etc.
- Develop and maintain a catalogue of data and analysis software for Photon and Neutron data.
- Gather feedback and cooperate with the EOSC governance bodies to improve the EOSC and develop standard relationships between scientific publications, Photon and Neutron scientific dataset (raw data), experimental reports, instruments and authors (via ORCID).

- **FAIRsFAIR (https://www.fairsfair.eu/)**

Objectives:

- Development of global standards for FAIR certification of repositories.
- Provide a platform for using and implementing the FAIR principles in the day to day work of European research data providers and repositories.
- Deliver essential FAIR dimensions of the Rules of Participation (RoP) and regulatory compliance.

- **EOSC-Pillar (https://www.eosc-pillar.eu)**

Objectives:

- Facilitating the liaison with budding national initiatives for the coordination of data and open science services, which are at the heart of the project concept.
- Ensuring the complementarity of competences and expertise, while including the point of view of the key stakeholders represented in the national initiatives (namely involving key research communities alongside e-Infrastructures and data service providers).

FURTHER DETAILS

Information regarding Open Science in France can be found on **Ouvrir La Science (https://www.ouvrirlascience.fr/category/ressources/)**.

Acknowledgements

With the contribution of Dr. Olivier Le Gall from INRAe & Maud Medves from Hceres

ROSiE

GERMANY

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity		●
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS		●
National Funder Policies on OS	●	
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Federal Ministry of Education and Research (https://www.bmbf.de/bmbf/en/home/home_node.html)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **Open Access in Germany – 2016 (https://www.bmbf.de/SharedDocs/Publikationen/de/bmbf/1/24102_Open_Access _in_Deutschland.pdf?__blob=publicationFile&v=5)**

Objectives:

- To support and strengthen the Green Way to Open Access.

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure		✖
Mention of Citizen Science		✖
Language availability		✖
Discipline-related perspective		✖
Type of Mandate - Scope	**Open Access Strategy – OA SOFT**	

- **Research Data Action Plan – 2020** (https://www.bildung-forschung.digital/digitalezukunft/shareddocs/Downloads/files/163_20_faktenblatt_aktionsplan_3_final.pdf?__blob=publicationFile&v=1)

Objectives:

- Focuses on data sovereignty and data infrastructures, data-based innovations and data competencies.

Responsibility aspect	Yes	No
Mention of FAIR	✖	
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability		✖
Discipline-related perspective	✖	
Type of Mandate - Scope	Action Plan – OA SOFT	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **DFG – Guidelines for the Use of Fund – 2015 (https://www.dfg.de/formulare/2_012e/2_012e.pdf)**

Objectives:
- Results funded by the DFG are expected to be published and available in OA.
- These results should be deposited in discipline-specific or institutional repositories.

NATIONAL DATA REPOSITORIES

- **OA-Netzwerk – Deutsche Initiative für Netzwerkinformation e.V. (DINI) – 1991 (https://dini.de/dienste-projekte/projekte/oa-netzwerk/)**

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Level: de facto National – Network of certified OA repositories.

Details: Support the national networking of repositories. More institutional and federal repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in five INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **ExPaNDS (https://expands.eu/)**

Objectives:

- Enable EOSC services and to provide coherent FAIR data services to the scientific users of national Photon and Neutron sources.
- Connect national PaN RIs through a platform of data analysis as a service for users from research institutes universities, industry etc.
- Develop and maintain a catalogue of data and analysis software for Photon and Neutron data.
- Gather feedback and cooperate with the EOSC governance bodies to improve the EOSC and develop standard relationships between scientific publications, Photon and Neutron scientific dataset (raw data), experimental reports, instruments and authors (via ORCID).

- **FAIRsFAIR (https://www.fairsfair.eu/)**

Objectives:

- Development of global standards for FAIR certification of repositories.
- Provide a platform for using and implementing the FAIR principles in the day to day work of European research data providers and repositories.
- Deliver essential FAIR dimensions of the Rules of Participation (RoP) and regulatory compliance.

- **EOSC-Nordic (https://eosc-nordic.eu/)**

Objectives:

- EOSC-Nordic aims to facilitate the alignment of the delivery of horizontal services by improving interoperability practices across the national initiatives.
- This will include identifying and engaging with prospective service providers and supporting their integration with the EOSC catalogue, service management framework and operational environment.
- EOSC-Nordic will work in close collaboration with FAIRsFAIR and other relevant initiatives (such as GoFAIR) on data management to promote best practices and support the adoption of relevant certification schemas.

- The project will demonstrate the potential of EOSC by piloting innovative solutions, designed to support cross border research collaboration, using the Nordic and Baltic countries as a testbed environment.
- EOSC-Nordic will consolidate and expand a distributed network of experts and service operators at local and national levels.

- **EOSC-Pillar** (https://www.eosc-pillar.eu)

Objectives:
- Facilitating the liaison with budding national initiatives for the coordination of data and open science services, which are at the heart of the project concept.
- Ensuring the complementarity of competences and expertise, while including the point of view of the key stakeholders represented in the national initiatives (namely involving key research communities alongside e-Infrastructures and data service providers).

- **EOSC-Synergy** (https://www.eosc-synergy.eu/)

Objectives:
- Expand EOSC capacity.
- Building EOSC capabilities.
- Foster EOSC services integration and promote quality.

FURTHER DETAILS

Information regarding Open Access in Germany can be found on **open-access.network (https://open-access.network/en/home)**.

Acknowledgements

With the contribution of Tom Lindemann from EUREC

GREECE

OVERVIEW	Yes	No
Active in Open Science	🔴	
Research Ethic & Integrity		🔴
Authorities responsible for OS	🔴	
National Policies on OS		🔴
National Laws on OS		🔴
National Funder Policies on OS		🔴
National Data Repositories	🔴	
Involved in INFRAEOSC-5b call	🔴	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

- **Ministry of Education and Religious Affairs (https://www.minedu.gov.gr/)**

- **Ministry of Development and Investments (https://www.mindev.gov.gr/)**

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- There are currently two national initiatives for Open Science in Greece, one top-down lead by the General Secretariat of Research and Technology (GSRT) Working Group and the bottom-up initiative lead by the National Open Science Task Force which is composed of representatives of 25 national academic and research institutions, research infrastructures, national nodes and Open Science initiatives working on a **National Open Science Plan (https://www.openaire.eu/blogs/drafting-the-proposal-for-a-national-open-science-strategy-in-greece-an-interinstitutional-approach)**.

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **HELIX – Hellenic Data Service – 2012 (https://hellenicdataservice.gr/project/page/what-is-helix)**

Level: National.

Details: More institutional and thematic repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **NI4OS (https://ni4os.eu/)**

Objectives:
- Support the development and inclusion of the national Open Science Cloud initiatives in 15 Member States and Associated Countries in the EOSC governance.
- Instil within the community the EOSC philosophy and FAIR principles for data Findability, Accessibility, Interoperability and Reusability.
- Provide technical and policy support for on-boarding of service providers into EOSC, including generic services (compute, data storage, data management), thematic services, repositories and data sets.

ROSiE

HUNGARY

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS		●
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

National Research, Development and Innovation Office **(https://nkfih.gov.hu/for-the-applicants)**

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- In 2021, the **National Research, Development and Innovation Office (https://nkfih.gov.hu/for-the-applicants)** published a **Position Paper on Open Science (https://nkfih.gov.hu/openscience/position-paper-on-open)** to call for further support in Open Science.
- The **National Research and Development Strategy (https://nkfih.gov.hu/english/research-development-innovation-strategy)** has been adopted in order to strengthen the knowledge production, improve its flow and make its use more efficient.
- In order to meet the National Reform Programme and Europe 2020 Strategy´s objectives the **Research Infrastructures in Hungary (https://nkfih.gov.hu/english-2017/strategy-making-by-the/hungarian-**

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research#:~:text=The%20National%20Research%20Infrastructure%20Roadmap%20aims%20to%20identify,connection%20points%20to%20European%20infrastructures%20and%20cooperation%20relationships) and the **National Smart Specialisation Strategy** (https://nkfih.gov.hu/english/national-smart-specialisation-strategy) documents have been adopted by the government.

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **HUNOR – HUNgarian Open Repositories consortium – 2008 (https://openscience.hu/hunor/)**

Level: de facto National – Consortium.

Details: More institutional and thematic repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **NI4OS (https://ni4os.eu/)**

Objectives:
- Support the development and inclusion of the national Open Science Cloud initiatives in 15 Member States and Associated Countries in the EOSC governance.
- Instil within the community the EOSC philosophy and FAIR principles for data Findability, Accessibility, Interoperability and Reusability.
- Provide technical and policy support for on-boarding of service providers into EOSC, including generic services (compute, data storage, data management), thematic services, repositories and data sets.

FURTHER DETAILS

Information regarding Open Science in Hungary can be found on **Open Science (https://openscience.hu/)**.

iRELAND

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories	●	
Involved in INFRAEOSC-5b call		●

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Department of Further and Higher Education, Research, Innovation and Science (DFHERIS) **(https://www.gov.ie/en/organisation/department-of-higher-education-innovation-and-science/)**

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **National Framework on the Transition to an Open Research Environment – 2019 (https://repository.dri.ie/catalog/0287dj04d)**

Objectives:

- To transit toward and create a National Action Plan regarding open research.
- Align with the European Commission policy regarding Open Science.

ROSiE

Responsibility aspect	Yes	No
Mention of FAIR	✖	
Mention of RE/RI	✖	
Mention of Infrastructure	✖	
Mention of Citizen Science	✖	
Language availability	✖	✖
Discipline-related perspective	✖	
Type of Mandate - Scope	**National Framework – OS HARD**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **Digital Repository of Ireland – 2015** (https://www.dri.ie/)

Level: National – Thematic (Arts, Social Sciences & Humanities).

Details: More institutional and thematic repositories exist.

ROSiE

INFRAEOSC-5b CALL

The country is not currently involved in INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

iTALY

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories		●
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of University and Research (https://www.mur.gov.it/it)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **National Programme for Research 2021-2027 – 2021 (https://www.mur.gov.it/sites/default/files/2021-01/Pnr2021-27.pdf)**

Objectives:

- The National Programme for Research 2021-2027 contains in the 6.2 section a presentation of the National Plan Open Science that should be issued as a stand-alone document.

Responsibility aspect	Yes	No
Mention of FAIR	✖	
Mention of RE/RI	✖	
Mention of Infrastructure	✖	
Mention of Citizen Science	✖	
Language availability		✖
Discipline-related perspective	✖	
Type of Mandate - Scope	**National Plan – OS N/A**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

Italy does not have national repositories but has multiples repositories at the institutional level.

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INFRAEOSC-5b CALL

The country takes currently part in three INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **ExPaNDS (https://expands.eu/)**

Objectives:

- Enable EOSC services and to provide coherent FAIR data services to the scientific users of national Photon and Neutron sources.
- Connect national PaN RIs through a platform of data analysis as a service for users from research institutes universities, industry etc.
- Develop and maintain a catalogue of data and analysis software for Photon and Neutron data.
- Gather feedback and cooperate with the EOSC governance bodies to improve the EOSC and develop standard relationships between scientific publications, Photon and Neutron scientific dataset (raw data), experimental reports, instruments and authors (via ORCID).

- **FAIRsFAIR (https://www.fairsfair.eu/)**

Objectives:

- Development of global standards for FAIR certification of repositories.
- Provide a platform for using and implementing the FAIR principles in the day to day work of European research data providers and repositories.
- Deliver essential FAIR dimensions of the Rules of Participation (RoP) and regulatory compliance.

- **EOSC-Pillar (https://www.eosc-pillar.eu)**

Objectives:

- Facilitating the liaison with budding national initiatives for the coordination of data and open science services, which are at the heart of the project concept.
- Ensuring the complementarity of competences and expertise, while including the point of view of the key stakeholders represented in the national initiatives (namely involving key research communities alongside e-Infrastructures and data service providers).

LATViA

OVERVIEW	Yes	No
Active in Open Science	🔴	
Research Ethic & Integrity	🔴	
Authorities responsible for OS	🔴	
National Policies on OS		🔴
National Laws on OS		🔴
National Funder Policies on OS		🔴
National Data Repositories	🔴	
Involved in INFRAEOSC-5b call	🔴	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Education and Science (https://www.izm.gov.lv/en)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- The Ministry of Education and Science is currently working on a National Open Science Strategy. The draft was open to public comments in 2021 and should be approved in 2022. **Here** **(https://www.izm.gov.lv/lv/latvijas-atvertas-zinatnes-strategija-2021-2027-gadam)** is the draft (in Latvian). The document include responsible aspect: mention of FAIR, citizen science and infrastructure.
- The Ministry of Education and Science implemented and published a study in 2020 **On open science and the development of a policy road map (https://www.izm.gov.lv/sites/izm/files/petijums-atverta_zinatne_21_2.pdf)** that mention research integrity.

ROSiE

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **National Library of Latvia – ACADEMIA – 2016 (https://academia.lndb.lv/par-academia/)**

Level: National.

Details: More institutional repositories exist – **University of Latvia (https://dspace.lu.lv/dspace/)** & **Riga Technical University (https://www.rtu.lv/en/research/open-access-initiative/rtu-e-resource-repository).**

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/).**

- **EOSC-Nordic (https://eosc-nordic.eu/)**

Objectives:

- EOSC-Nordic aims to facilitate the alignment of the delivery of horizontal services by improving interoperability practices across the national initiatives.
- This will include identifying and engaging with prospective service providers and supporting their integration with the EOSC catalogue, service management framework and operational environment.
- EOSC-Nordic will work in close collaboration with FAIRsFAIR and other relevant initiatives (such as GoFAIR) on data management to promote best practices and support the adoption of relevant certification schemas.
- The project will demonstrate the potential of EOSC by piloting innovative solutions, designed to support cross border research collaboration, using the Nordic and Baltic countries as a testbed environment.
- EOSC-Nordic will consolidate and expand a distributed network of experts and service operators at local and national levels.

FURTHER DETAILS

Information regarding Open Science & Open Access in Latvia can be found on the **National Open Access Service (https://www.napd.lu.lv/)**.

Acknowledgements

With the contribution of Dr. Signe Mežinska & Inese Poļaka from UL

ROSiE

LiTHUANiA

OVERVIEW	Yes	No
Active in Open Science	🔴	
Research Ethic & Integrity		🔴
Authorities responsible for OS	🔴	
National Policies on OS		🔴
National Laws on OS	🔴	
National Funder Policies on OS	🔴	
National Data Repositories	🔴	
Involved in INFRAEOSC-5b call	🔴	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Education, Science and Sport (https://smsm.lrv.lt/en/)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- A Working Group has been set up in 2020 by the Ministry of Education, Science and Sport to develop a national Open Access/Open Science Policy.

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

- **Law on Higher Education and Research – 2009 (last amended in 2016) (https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/548a2a30ead611e59b76f36d7fa634f8?jfwid=rp9xf47k7)**

Objectives:

- The Law covers Open Access and research data with the obligation for research institutions and higher education´s research works to be communicated to the public.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **LMT Guidelines on Open Access to Scientific Publications and Data – 2016 (https://www.lmt.lt/data/public/uploads/2016/09/eng_-atvira-prieiga-_-galutinis.pdf)**

Objectives:
- To ensure the dissemination of research results and to circulate scientific knowledge.
- To promote cooperation between researchers and to avoid potentially identical or uncoordinated research.
- To enhance the credibility of research results, transparent obtaining and maintaining of data, and cherish academic ethics.
- To facilitate the cooperation between business and science, science and policy makers, and social partners.
- To provide a better societal and economic return of research results.

NATIONAL DATA REPOSITORIES

- **The Lithuanian Academic Electronic Library (eLABa) – 2006 (https://www.elaba.lt/elaba-portal/en/pradzia)**

Level: National.

Details: More institutional and thematic repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **EOSC-Nordic (https://eosc-nordic.eu/)**

Objectives:
- EOSC-Nordic aims to facilitate the alignment of the delivery of horizontal services by improving interoperability practices across the national initiatives.
- This will include identifying and engaging with prospective service providers and supporting their integration with the EOSC catalogue, service management framework and operational environment.
- EOSC-Nordic will work in close collaboration with FAIRsFAIR and other relevant initiatives (such as GoFAIR) on data management to promote best practices and support the adoption of relevant certification schemas.

- The project will demonstrate the potential of EOSC by piloting innovative solutions, designed to support cross border research collaboration, using the Nordic and Baltic countries as a testbed environment.
- EOSC-Nordic will consolidate and expand a distributed network of experts and service operators at local and national levels.

LUXEMBOURG

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS		●
National Funder Policies on OS	●	
National Data Repositories	●	
Involved in INFRAEOSC-5b call		●

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Higher Education and Research (MESR) (https://mesr.gouvernement.lu/en/le-ministere.html)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **National Policy on Open Access – 2015 (https://storage.fnr.lu/index.php/s/O4DDe2SgEL0N9J5#pdfviewer)**

Objectives:

- Results from publicly funded research are expected to be disseminated via high quality, peer-reviewed publications that are made freely available to any potential reader or user with access to internet.
- The Luxembourg´s research institutions are adhering to the **Science Europe Principles for the Transition to Open Access to Research Publications (https://www.vr.se/download/18.514d156f1639984ae0741758/1529480567395/Science%20Europe%20Principles%20on%20Open%C2%A0Access%20to%20Research%C2%A0Publications.pdf)**.

- This policy is in line with the **European Commission´s Recommendations on Access to and Preservation of Scientific Information (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32018H0790)**, and the **European Commission´s Communication Towards better access to scientific information (https://www.eesc.europa.eu/sites/default/files/resources/docs/2012-09_26_-better-access-to-scientific-information.pdf).**
-

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability	✖	
Discipline-related perspective	✖	
Type of Mandate - Scope	**National Policy – OA HARD**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **FNR Open Access policy – 2017 (https://www.fnr.lu/2017-annual-report/)**

Objectives:

- Projects (co)funded by FNR must be accessible in Open Access to peer-reviewed scientific publications.
- This policy has been completed by FNR´s alignment with the **Plan S (https://www.coalition-s.org/)** guidelines in **2021 (https://www.fnr.lu/open-access-**

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coalition-s-plan-s-implementation-guidance/?hilite=%27Open%27%2C%27access%27%2C%27policy%27).

NATIONAL DATA REPOSITORIES

- **National Library of Luxembourg a-z.lu – 2013 (https://bnl.public.lu/fr/rechercher/outils-recherche/az-lu.html)**

Level: Institutional – de facto National.

Details: More institutional and thematic repositories exist.

INFRAEOSC-5b CALL

The country is not currently involved in INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

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MALTA

OVERVIEW	Yes	No
Active in Open Science	🔴	
Research Ethic & Integrity	🔴	
Authorities responsible for OS	🔴	
National Policies on OS		🔴
National Laws on OS		🔴
National Funder Policies on OS		🔴
National Data Repositories	🔴	
Involved in INFRAEOSC-5b call		🔴

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

- **Ministry for Education and Sport (https://education.gov.mt/en/Pages/educ.aspx)**

- **Ministry for Equality, Research and Innovation (https://mfer.gov.mt/en/Pages/Homepage.aspx)**

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- The **University of Malta (UM) (Library) (https://www.um.edu.mt/library)** and **MCST (https://mcst.gov.mt/)** are currently leading a consortium working on the production of a National Policy on Open Science.
- With support of the H2020 Policy Support Facility, Malta is working on an **National Open Access Policy (https://meae.gov.mt/en/Public_Consultations/MRIC/Pages/Consultations/TheNationalOpenAccessPolicy.aspx).**

- The country´s **National Research and Innovation Strategy 2020 – 2014 (http://mcst.gov.mt/wp-content/uploads/2017/02/National-RI-Strategy-2020-June-2014.pdf)** foresees that publicly funded research are available in Open Access.

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **OAR@UM – 2014 (https://www.um.edu.mt/library/oar/)**

Level: Institutional – de facto National.

Details: Only repository in the country.

INFRAEOSC-5b CALL

The country is not currently involved in INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

FURTHER DETAILS

Information regarding Open Science in Malta can be found on the **PluMTri (Platform for Maltese Research and Innovation) (https://www.plumtri.org/open-science)**.

ROSiE

NETHERLANDS

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Education, Culture and Science (https://www.government.nl/ministries/ministry-of-education-culture-and-science)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **National Plan Open Science – 2017 (https://www.openscience.nl/files/openscience/2019-02/nationalplanopenscience_en.pdf)**

Objectives:

- Promoting Open Access to scientific publications (open access).
- Promoting optimal use and reuse of research data.
- Adapting evaluation and award systems to bring them into line with the objectives of open science (reward systems).

ROSiE

Responsibility aspect	Yes	No
Mention of FAIR	✖	
Mention of RE/RI	✖	
Mention of Infrastructure	✖	
Mention of Citizen Science	✖	
Language availability	✖	
Discipline-related perspective	✖	
Type of Mandate - Scope	**National Plan – OS SOFT**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws regarding Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **NARCIS – National Academic Research and Collaborations Information System – 2004** (https://www.narcis.nl/about/Language/en)

Level: National.

Details: NARCIS is a national portal giving access to scientific information and publications in OA from the repositories of all Dutch universities, research funding organisations and research performing organisations.

INFRAEOSC-5b CALL

The country takes currently part in three INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **FAIRsFAIR (https://www.fairsfair.eu/)**

Objectives:

- Development of global standards for FAIR certification of repositories.
- Provide a platform for using and implementing the FAIR principles in the day to day work of European research data providers and repositories.
- Deliver essential FAIR dimensions of the Rules of Participation (RoP) and regulatory compliance.

- **EOSC-Nordic (https://eosc-nordic.eu/)**

Objectives:

- EOSC-Nordic aims to facilitate the alignment of the delivery of horizontal services by improving interoperability practices across the national initiatives.
- This will include identifying and engaging with prospective service providers and supporting their integration with the EOSC catalogue, service management framework and operational environment.
- EOSC-Nordic will work in close collaboration with FAIRsFAIR and other relevant initiatives (such as GoFAIR) on data management to promote best practices and support the adoption of relevant certification schemas.
- The project will demonstrate the potential of EOSC by piloting innovative solutions, designed to support cross border research collaboration, using the Nordic and Baltic countries as a testbed environment.
- EOSC-Nordic will consolidate and expand a distributed network of experts and service operators at local and national levels.

- **EOSC-Synergy (https://www.eosc-synergy.eu/)**

Objectives:

- Expand EOSC capacity.
- Building EOSC capabilities.
- Foster EOSC services integration and promote quality.
- Promoting EOSC policy harmonisation.
- Develop the EOSC Human capital.

FURTHER DETAILS

More information regarding Open Science in the Netherlands can be found on the **National Platform Open Science**.

NORWAY

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS		●
National Funder Policies on OS	●	
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Norwegian Ministry of Education and Research (https://www.regjeringen.no/no/dep/kd/id586/)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **National Strategy on access to and sharing of research data – 2017 (https://www.regjeringen.no/contentassets/3a0ceeaa1c9b4611a1b86fc5616abde7/ en-gb/pdfs/national-strategy-on-access_summary.pdf)**

Objectives:

- Research data should be as open as possible, as closed as necessary.
- Research communities should make sure to address the archive aspect of research data.

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science		✖
Language availability	✖	
Discipline-related perspective		✖
Type of Mandate - Scope	**National Strategy – OA HARD**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **The Research Council Policy for Open Science – 2020 (https://www.forskningsradet.no/siteassets/forskningspolitisk-radgivning/apen-forskning/nfr-policy-open-science-eng.pdf)**
- **The Research Council of Norway's Policy for Open Access to Research Data – 2017 (https://www.forskningsradet.no/contentassets/e4cd6d2c23cf49d4989bb10c5eea087a/the-research-council-of-norways-policy-for-open-access-to-research-data.pdf)**

Objectives:

- The Research Council will "use its funding instruments to help to increase expertise within open science and issues relating to research ethics".
- Provided research is made publicly available. The council will "provide funding to cover costs for open access publication". Making the research publicly available can consist of:
  - Publishing through open access platforms,
  - Using open repositories, or

- o Publishing in journals which are part of a collective agreement that aims at transitioning to open access
- Funded stakeholders must comply with open data and metadata storage rules, adhere to FAIR guiding principles, and relevant projects must archive in the Norwegian Centre for Research Data (NSD).

NATIONAL DATA REPOSITORIES

- **CRIStin – NORA – Norwegian Open Research Archive – 2005 (https://nora.openaccess.no/)**

Level: de facto National.

Details: Harvest all Norwegian institutional repositories. More institutional and thematic repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/).**

- **EOSC-Nordic (https://eosc-nordic.eu/)**

Objectives:

- EOSC-Nordic aims to facilitate the alignment of the delivery of horizontal services by improving interoperability practices across the national initiatives.
- This will include identifying and engaging with prospective service providers and supporting their integration with the EOSC catalogue, service management framework and operational environment.
- EOSC-Nordic will work in close collaboration with FAIRsFAIR and other relevant initiatives (such as GoFAIR) on data management to promote best practices and support the adoption of relevant certification schemas.
- The project will demonstrate the potential of EOSC by piloting innovative solutions, designed to support cross border research collaboration, using the Nordic and Baltic countries as a testbed environment.
- EOSC-Nordic will consolidate and expand a distributed network of experts and service operators at local and national levels.

Acknowledgements

With the contribution of Rosemarie de la Cruz Bernabe & Cristiana-Anca Voinov from UiO

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POLAND

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity		●
Bodies involved in OS	●	
National Policies on OS		●
National Laws on OS		●
National Funder Policies on OS	●	
National Data Repositories		●
Involved in INFRAEOSC-5b call	●	

BODIES INVOLVED IN OPEN SCIENCE & ACCESS

Ministry of Science and Higher Education (MNiSW) **(https://www.gov.pl/web/science)**

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- In 2018 the Ministry of Science and Higher Education (MNiSW) published a **report (https://www.gov.pl/web/edukacja-i-nauka/dokumenty-na-temat-otwartego-dostepu)** on the implementation of an Open Access policy.
- An initial strategic document on the future of Open Access in Poland was published in 2015: "Directions of the development of open access to research publications and research results in Poland". This document is addressing briefly research data, by recommending an adoption of an open data policy, taking into consideration internationally recognised best practices. These recommendations are not binding for the research performing organisations in Poland.

ROSiE

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws regarding Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **National Science Centre (NCN) Policy on Open Access – 2021 (https://www.ncn.gov.pl/sites/default/files/pliki/2021_10_instrukcja_open_access_NCN.pdf)**

Objectives:

- All scholarly publications on the results from research funded by the NCN must be published in Open Access Journals, on Open Access Platforms, or made immediately available through Open Access Repositories.
- A Journal Checker Tool is available on the website of NCN - a web-based tool which provides clear advice to researchers on how they can comply with the Funder's Open Access policy when seeking to publish.

NATIONAL DATA REPOSITORIES

Poland does not have national repositories but has multiples repositories at the institutional level.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **EOSC-Synergy (https://www.eosc-synergy.eu/)**

Objectives:

- Expand EOSC capacity.
- Building EOSC capabilities.
- Foster EOSC services integration and promote quality.
- Promoting EOSC policy harmonisation.
- Develop the EOSC Human capital.

Acknowledgements

With the contribution of Teodora Konach from OeAWI

PORTUGAL

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity		●
Authorities responsible for OS	●	
National Policies on OS		●
National Laws on OS		●
National Funder Policies on OS	●	
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Science, Technology and Higher Education – MCTES (https://www.portugal.gov.pt/en/gc21/ministries/science-technology-and-higher-education)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- Since 2016 the government and the MCTES are working on the development of a **National Policy for Open Science (https://www.ciencia-aberta.pt/nosp)**. Two **reports (https://www.ciencia-aberta.pt/documentos)** have been produced within that process.

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

ROSiE

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **FTC Policy on management and sharing of data and other results arising from FTC-funded research – 2014 (https://www.fct.pt/documentos/PoliticaAcessoAberto_Dados.pdf)**

Objectives:
- Call researchers to share their data with other researchers in appropriate Open Access databases – the policy is however not mandatory.
- Encourage data management plan to be produced and best practices to be followed.

NATIONAL DATA REPOSITORIES

- **RCAAP - Repositórios Científicos de Acesso Aberto de Portugal - 2008 (https://www.rcaap.pt/)**

Level: de facto National.

Details: More institutional repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in two INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **FAIRsFAIR (https://www.fairsfair.eu/)**

Objectives:
- Development of global standards for FAIR certification of repositories.
- Provide a platform for using and implementing the FAIR principles in the day to day work of European research data providers and repositories.
- Deliver essential FAIR dimensions of the Rules of Participation (RoP) and regulatory compliance.

- **EOSC-Synergy (https://www.eosc-synergy.eu/)**

Objectives:
- Expand EOSC capacity.
- Building EOSC capabilities.
- Foster EOSC services integration and promote quality.
- Promoting EOSC policy harmonisation.

- Develop the EOSC Human capital.

FURTHER DETAILS

Information regarding Open Science in Portugal can be found on **Open Science (https://www.ciencia-aberta.pt/home)**.

ROMANiA

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity		●
Authorities responsible for OS	●	
National Policies on OS		●
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

- **Ministry of Research, Innovation and Digitalisation (https://www.research.gov.ro/)**

- **UEFISCDI Executive Agency for Higher Education, Research, Development and Innovation Funding – Ministry of Education (https://uefiscdi.gov.ro/?we=module.org.uefiscdi.home&wtok=&wtkps=fY5LDoIwFEX30jmVfnjIYw/GxBWQtsirlIoVMDHuXWDmxNn9nJvcBjW+EypkiSyrExYSmQjLEB2QV2NDuQYodZF8nGEuBj/3JPMwtiZ73UyZ+oyM6p5q2wpAZu19OF8OsgKt8mMJW14h+/FC79zpP7UeWdwuVjxEO/WOx8eVT66lZCzxLoa1/3wB&wchk=8c5f2597c180ef9b72b7ad59058e1762c4148f2f)**

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- Since 2019 and in collaboration with the Ministry of Education, UEFISCDI is working on developing a **national strategic framework (https://uefiscdi.gov.ro/open-science-in-romania)** on Open Science.
- The **National Plan for Research and Innovation 2015-2020 (https://www.research.gov.ro/ro/articol/1434/programe-nationale)** offered limited support to Open Science.
- The **National RDI Strategy 2014-2020 (https://gov.ro/en/government/cabinet-meeting/national-research-development-and-innovation-strategy-sncdi-2014-2020-engine-of-economic-and-social-development)** offered limited support to Open Science.
- Romania passed series of five **Action Plans (https://www.opengovpartnership.org/members/romania/#current-action-plan)** as part of the **National Plan for Open Government Partnership (https://www.opengovpartnership.org/)** since 2012. These action plans are composed of commitments to support open data and pushing for the creation of national-level policies.

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **AnelisPlus National Deposit – 2013 (https://dspace.anelisplus.ro/xmlui/)**

Level: De facto National.

Details: More institutional and thematic repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **NI4OS (https://ni4os.eu/)**

ROSiE

Objectives:

- Support the development and inclusion of the national Open Science Cloud initiatives in 15 Member States and Associated Countries in the EOSC governance.
- Instil within the community the EOSC philosophy and FAIR principles for data Findability, Accessibility, Interoperability and Reusability.
- Provide technical and policy support for on-boarding of service providers into EOSC, including generic services (compute, data storage, data management), thematic services, repositories and data sets.

FURTHER DETAILS

Information regarding Open Science & Open Access in Romania can be found on **BrainMap (https://www.brainmap.ro/)** & **ERRIS (https://eeris.eu/index.php)**.

SLOVAKiA

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Education, Science, Research and Sport of the Slovak Republic (https://www.minedu.sk/about-the-ministry/)

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **National Strategy for Open Science – 2021-2028 – 2021 (https://www.openaire.eu/blogs/slovak-national-strategy-for-open-science-2021-2028)**

Objectives:

- Open access to publicly funded publications and scientific data.
- Open Science financing and education, and the technical infrastructure for Open Science
- Protection of intellectual property rights.
- Usage of existing open IT tools and open data.
- Evaluation of R&D with principles of Open Science & Citizen Science support.
- This strategy will be implemented through two-years actions plans, the first one being the **Action Plan for Open Government in Slovak Republic for years – 2020-2021**

ROSiE

(https://www.opengovpartnership.org/wp-content/uploads/2019/12/Slovakia_Action-Plan_2019-2021_EN.pdf).

Responsibility aspect	Yes	No
Mention of FAIR	✖	
Mention of RE/RI	✖	
Mention of Infrastructure	✖	
Mention of Citizen Science	✖	
Language availability	✖	
Discipline-related perspective	✖	
Type of Mandate - Scope	**National Strategy – Open Science SOFT**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **Slovak Centre of Scientific and Technical Information (SCSTI) – SK CRIS – 2013 (https://www.cvtisr.sk/)**

Level: Thematic (natural, technical, economic and social sciences) – de facto National.

ROSiE

Details: The system respects international standards for information systems on science and research, recommended by the European Commission.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **EOSC-Synergy (https://www.eosc-synergy.eu/)**

Objectives:

- Expand EOSC capacity.
- Building EOSC capabilities.
- Foster EOSC services integration and promote quality.
- Promoting EOSC policy harmonisation.
- Develop the EOSC Human capital.

SLOVENiA

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity		●
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Education, Science and Sport **(https://www.gov.si/en/state-authorities/ministries/ministry-of-education-science-and-sport/)**

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **National Strategy of Open Access to Scientific Publications and Research Data in Slovenia 2015-2020 – 2015 (https://www.gov.si/assets/ministrstva/MIZS/Dokumenti/ZNANOST/Strategije/National-strategy-of-open-access-to-scientific-publications-and-research-data-in-Slovenia-2015-2020.pdf)**

Objectives:

- Require Open Access by default.
- Require the production of a data management plan.
- Provide recommendations regarding long term data storing.

ROSiE

- The Strategy was completed by the **Action Plan (https://www.gov.si/assets/ministrstva/MIZS/Dokumenti/ZNANOST/Strategije/Akcijski-nacrt-izvedbe-nacionalne-strategije-odprtega-dostopa-do-znanstvenih-objav-in-raziskovalnih-podatkov-v-Sloveniji-2015-2020.pdf)** in 2017.

Responsibility aspect	Yes	No
Mention of FAIR		✖
Mention of RE/RI		✖
Mention of Infrastructure	✖	
Mention of Citizen Science	✖	
Language availability	✖	
Discipline-related perspective		✖
Type of Mandate - Scope	**National Strategy – OA HARD**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **Open Science Slovenia Portal – 2013 (http://openscience.si/Default.aspx)**

Level: National.

Details: The portal has been developed by the country´s universities in cooperation with the Ministry of Education, Science and Sport in order to gather the country´s repositories.

INFRAEOSC-5b CALL

The country takes currently part in one INFRAEOSC-5b initiative, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **NI4OS (https://ni4os.eu/)**

Objectives:
- Support the development and inclusion of the national Open Science Cloud initiatives in 15 Member States and Associated Countries in the EOSC governance.
- Instil within the community the EOSC philosophy and FAIR principles for data Findability, Accessibility, Interoperability and Reusability.
- Provide technical and policy support for on-boarding of service providers into EOSC, including generic services (compute, data storage, data management), thematic services, repositories and data sets.

SPAiN

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS	●	
National Laws on OS		●
National Funder Policies on OS		●
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Science and Innovation **(https://www.ciencia.gob.es/)**

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

- **State Plan for Research, Development and Innovation 2017-2020 – 2018 (https://www.google.at/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjd6fG_lbn1AhXVRPEDHSuMDngQFnoECAgQAQ&url=https%3A%2F%2Fwww.ciencia.gob.es%2Fdam%2Fjcr%3A4df69bec-c113-4e22-ae45-37ba72d53b7c%2FPlanEstatalIDI.pdf&usg=AOvVaw3IiJjQatdKsKXU3aVcyKec)**

Objectives:

- The State Plan represent the main instrument in the hands of the Government to reach the objectives laid in the **Spanish Strategy for Science and Technology and Innovation 2013-2020 (https://services.icono.fecyt.es/politicas/Documents/Resumen%20ejecutivo%20EST**

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RATEGIA%20ESPA%C3%91OLA%20DE%20CIENCIA%20Y%20TECNOLOG%C3%8DA%20Y%20DE%20INNOVACI%C3%93N%202013-2020.pdf) and the Europe 2020 Strategy.
- The State Plan Data provides a voluntary mandate on publicly funded research data, which should be stored and made available through Open Access. It also acknowledges that for reasons of security, confidentiality or commercial reasons, data must as well be protected and might not always be accessible in Open Access.

Responsibility aspect	Yes	No
Mention of FAIR	✖	
Mention of RE/RI	✖	
Mention of Infrastructure	✖	
Mention of Citizen Science	✖	
Language availability		✖
Discipline-related perspective	✖	
Type of Mandate - Scope	**State Plan – OA SOFT**	

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national funder policies on Open Science or Open Access.

NATIONAL DATA REPOSITORIES

- **Ministry of Science and Innovation – RECOLECTA– 2007 (https://www.recolecta.fecyt.es/what-is-it?language=en)**

Level: de facto National – National aggregator of national repositories.

Details: More institutional and thematic repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in three INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://eosc-portal.eu/)**.

- **ExPaNDS (https://expands.eu/)**

Objectives:

- Enable EOSC services and to provide coherent FAIR data services to the scientific users of national Photon and Neutron sources.
- Connect national PaN RIs through a platform of data analysis as a service for users from research institutes universities, industry etc.
- Develop and maintain a catalogue of data and analysis software for Photon and Neutron data.
- Gather feedback and cooperate with the EOSC governance bodies to improve the EOSC and develop standard relationships between scientific publications, Photon and Neutron scientific dataset (raw data), experimental reports, instruments and authors (via ORCID).

- **FAIRsFAIR (https://www.fairsfair.eu/)**

Objectives:

- Development of global standards for FAIR certification of repositories.
- Provide a platform for using and implementing the FAIR principles in the day to day work of European research data providers and repositories.
- Deliver essential FAIR dimensions of the Rules of Participation (RoP) and regulatory compliance.

- **EOSC-Synergy (https://www.eosc-synergy.eu/)**

Objectives:

- Expand EOSC capacity.
- Building EOSC capabilities.
- Foster EOSC services integration and promote quality.
- Promoting EOSC policy harmonisation.
- Develop the EOSC Human capital.

SWEDEN

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity		●
Authorities responsible for OS	●	
National Policies on OS		●
National Laws on OS		●
National Funder Policies on OS	●	
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Ministry of Education and Research **(https://www.government.se/government-of-sweden/ministry-of-education-and-research/)**

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- The **Swedish Research Council (Vetenskapsrådet, VR) (https://www.vr.se/english.html)** received assignment from the government in 2017 to coordinate the national implementation of Open Access to research data and in 2018 to develop criteria assessing the compliance of research data at least partly financed publicly with the FAIR principles.
- The Government in the **Research Bill Knowledge in Collaboration – 2016 (https://www.government.se/press-releases/2016/11/collaborating-for-knowledge--for-societys-challenges-and-strengthened-competitiveness/)** promotes Open Access for research results in order to maintain and further research excellency.

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- The national funder organisation **Swedish Research Council (Vetenskapsrådet, VR) (https://www.vr.se/english.html)** published a **"Proposal for National Guidelines for Open Access to Scientific Information" (https://www.vr.se/english/analysis/reports/our-reports/2015-03-02-proposal-for-national-guidelines-for-open-access-to-scientific-information.html)** in January 2015 that proposes a set of guidelines addressing the publication in Open Access.

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws regarding Open Science or Open Access.

NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **FORMAS – Guidelines for applicants – 2021** (https://formas.se/en/start-page/applying-for-funding/how-it-works/good-to-know-before-you-apply.html#h-Openaccesstoresearchresultsanddata)

Objectives:

- Require the publication of research results and data in Open Access.
- Require a clear mention of the ethical aspects of the research.

NATIONAL DATA REPOSITORIES

- **SND – Swedish National Data Service – 2008 (https://snd.gu.se/en)**

Level: de facto National – Consortium.

Details: More institutional and thematic repositories exist.

INFRAEOSC-5b CALL

The country takes currently part in two INFRAEOSC-5b initiatives, regional initiatives established to support the **European Open Science Cloud (EOSC) (https://expands.eu/)**.

- **ExPaNDS (https://expands.eu/)**

Objectives:

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- **EOSC-Nordic** (https://eosc-nordic.eu/)

Objectives:

- EOSC-Nordic aims to facilitate the alignment of the delivery of horizontal services by improving interoperability practices across the national initiatives.
- This will include identifying and engaging with prospective service providers and supporting their integration with the EOSC catalogue, service management framework and operational environment.
- EOSC-Nordic will work in close collaboration with FAIRsFAIR and other relevant initiatives (such as GoFAIR) on data management to promote best practices and support the adoption of relevant certification schemas.
- The project will demonstrate the potential of EOSC by piloting innovative solutions, designed to support cross border research collaboration, using the Nordic and Baltic countries as a testbed environment.
- EOSC-Nordic will consolidate and expand a distributed network of experts and service operators at local and national levels.

UNiTED KiNGDOM

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS		●
National Laws on OS		●
National Funder Policies on OS	●	
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

AUTHORITIES RESPONSIBLE FOR OPEN SCIENCE & ACCESS

Policy in relation to higher education and research is devolved to the nations of the UK

NATIONAL POLICIES ON OPEN SCIENCE & ACCESS

The country does not currently have national policies on Open Science or Open Access but is active in this field:

- The main institutions involved in OS are the four UK higher education's funding bodies, namely the UK Research and Innovation, the Higher Education Funding Council for Wales, the Scottish Funding Council and the Department for the Economy in Northern Ireland.

NATIONAL LAWS ON OPEN SCIENCE & ACCESS

The country does not currently have national laws on Open Science or Open Access.

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NATIONAL FUNDER POLICIES ON OPEN SCIENCE & ACCESS

- **UK Research and Innovation. UKRI Open Access Policy – 2021** **(https://www.ukri.org/wp-content/uploads/2021/08/UKRI-201221-UKRIOpenAccessPolicy-3.pdf)**

Objectives:

- Ensuring Open Access for research articles based on UKRI funded research published on or after 1 April 2022.
- Ensuring Open Access for monographs, book chapters and edited collections based on UKRI funded research published on or after 1 January 2024.

- **Higher Education Funding Council for England, Research Councils UK, Universities UK, Wellcome Trust. Concordat on Open Research Data – 2016** **(https://www.ukri.org/wp-content/uploads/2020/10/UKRI-020920-ConcordatonOpenResearchData.pdf)**

Objectives:

- To ensure research data gathered and generated by members of the UK research community is, wherever possible, made openly available for use by others in a manner consistent with relevant legal, ethical and regulatory frameworks and disciplinary norms, and with due regard to the costs involved.

NATIONAL DATA REPOSITORIES

- **UK Data Service – 1967** **(https://ukdataservice.ac.uk/)**

Level: National.

Details: Established 1967 funded by the Economics and Social Research Council (ESRC). Funded by UK Research and Innovation since 2018. De facto national repository for social science data from research projects. ESRC funded researcher must deposit metadata in the UK Data Service to make the data set findable, and must deposit full data sets either in the UK Data Service or elsewhere (e.g. an institutional repository) **https://www.ukri.org/manage-your-award/publishing-your-research-findings/making-your-research-data-open/** Also holds census data and other official data.

INFRAEOSC-5b CALL

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- **EOSC-Synergy (https://www.eosc-synergy.eu/)**

Objectives:

- Expand EOSC capacity.
- Building EOSC capabilities.
- Foster EOSC services integration and promote quality.
- Promoting EOSC policy harmonisation.
- Develop the EOSC Human capital.

FURTHER DETAILS

Information regarding Open Science in the United Kingdom can be found on **UK Reproducibility Network (https://www.ukrn.org/)**.

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