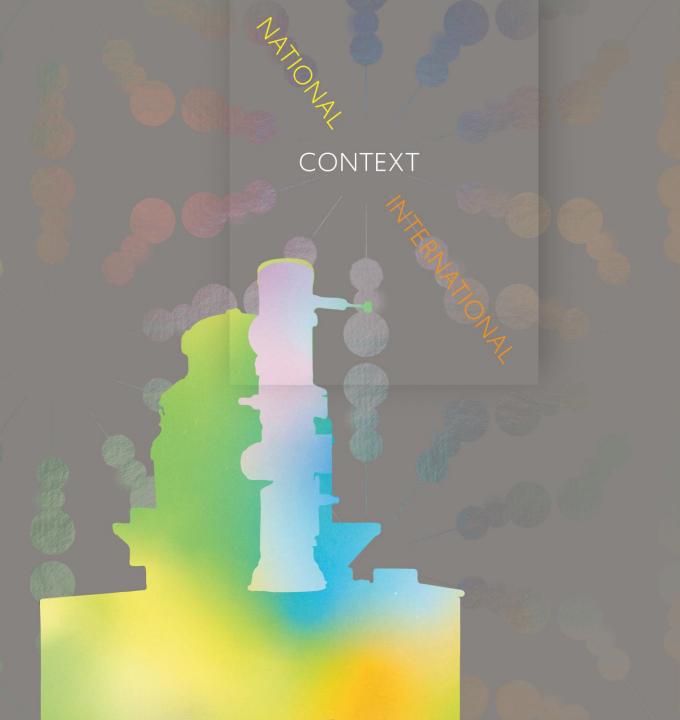


FAIR-IMPACT Roadshow Romania
Collaborative FAIR Data Practices & Tools
October 8<sup>th</sup>, 2024

Alina Irimia, PhD
Open Science Projects coordinator, UEFISCDI



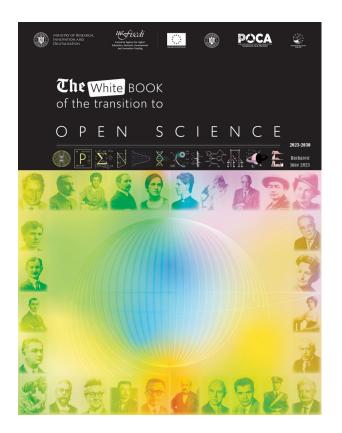


## National strategic framework for Open Science

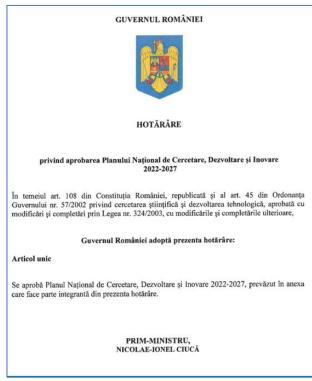
The National Strategy for RDI and RIS3 2022-2027(Governmental Decision no. 933 of 20 July 2022)

The White Paper of the Transition to Open Science (2023-2030)





The National Plan for Research, Development and Innovation 2022-2027 (Governmental Decision no. 1188 of 29 Sept. 2022)





## National Strategy for RDI & RIS3 2022-2027

Objective 1.2. Ensuring the transition to open science and facilitating the road towards excellence in scientific research

### Core strategic actions

- Mandatory OA to the scientific publications resulting from publicly funded research
- DMPs (Mandatory)
- RDM costs eligible
- Data: FAIR & "as open as possible, as closed as necessary
- Infrastructure & services -> EOSC
- Rethinking the research assessment system
- Promotes citizen science

#### GUVERNUL ROMÂNIEI



#### HOTĂRÂRE

privind aprobarea Strategiei Naționale de Cercetare, Inovare și Specializare Inteligentă 2022-2027

În temeiul art. 108 din Constituția României, republicată, și al art. 3 alin. (2) din Ordonanța Guvernului nr. 57/2002 privind cercetarea științifică și dezvoltarea tehnologică, aprobată cu modificări și completări prin Legea nr. 324/2003, cu modificările și completările ulterioare

Guvernul României adoptă prezenta hotărâre:

#### Articol unic

Se aprobă Strategia Națională de Cercetare, Inovare și Specializare Inteligentă 2022-2027, prevăzută în anexa care face parte integrantă din prezenta hotărâre.

#### PRIM-MINISTRU,

NICOLAE-IONEL CIUCĂ

## Law 179/2022 on open data and the reuse of information from the public sector

DIRECTIVE (UE) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information

## Article 13 (1)

"open access policies respect the 'open by default' principle and are **compatible** with FAIR principles: Findable, accessible, interoperable, and reusable, in accordance with the Marrakech Agreement establishing the World Trade Organization, ratified by Romania through Law no. 133/1994"

https://www.open-science.ro/resurse/legea-179-2022-privind-datele-deschise-si-reutilizarea-informatiilor-din-sectorul-public

## The National Plan for RDI 2022-2027

## Main instrument for implementing the National RDI& RIS3 Strategy 2022-2027.

## Types of support/ projects proposed to be funded

- Developing the institutional capacity to implement open science practices - ensure alignment with the European Union's recommendations and policies on OS;
- Grants for the **development of skills** needed to implement open science;
- APCs & RDM costs-eligible in all projects funded;
- Supporting the participation of Romania and the relevant infrastructure & services in/ for the development of EOSC;
- Grants of support for implementation OS practices (OA and FAIR data);

## GUVERNUL ROMÂNIEI HOTĂRÂRE privind aprobarea Planului Național de Cercetare, Dezvoltare și Inovare În temeiul art, 108 din Constitutia României, republicată și al art. 45 din Ordonanța Guvernului nr. 57/2002 privind cercetarea științifică și dezvoltarea tehnologică, aprobată cu modificări și completări prin Legea nr. 324/2003, cu modificările și completările ulterioare, Guvernul României adoptă prezenta hotărâre: Articol unic Se aprobă Planul Național de Cercetare, Dezvoltare și Inovare 2022-2027, prevăzut în anexa care face parte integrantă din prezenta hotărâre. PRIM-MINISTRU, NICOLAE-IONEL CIUCĂ

Governmental Decision no.1188/29 September 2022

## Other types of support

The FDI (Institutional Development Fund) aims to support institutional development projects at public universities in Romania, funded from the Ministry of Education's budget, with the purpose of increasing institutional capacity and improving the quality of the national higher education system.

Domain 6: Development of institutional capacity for research in higher education institutions.

OG 6.6. Support for activities carried out by higher education institutions for the development of university research:

• Support for universities aimed at developing institutional capacity for the implementation of open science practices.

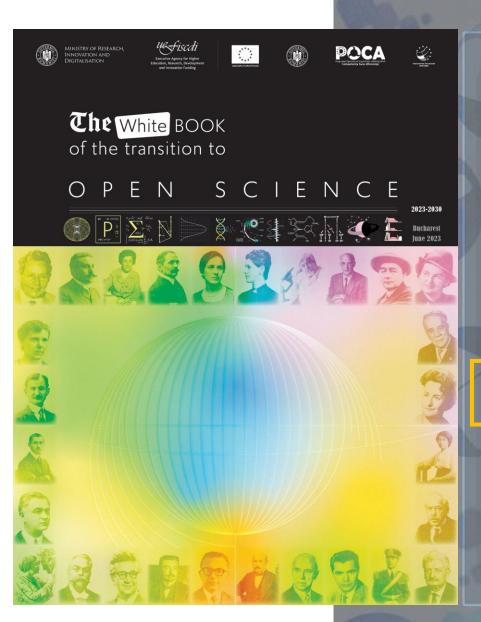






https://www.cnfis.ro/finantare/dezvoltare-institutionala/competitia-fdi-2024/

## VISION



#### Supporting a systemic transformation towards open science

is necessary and aligns with European policies stemming from digitalisation and technological changes that have influenced the conduct and organization of scientific research, as well as the participatory role of society in knowledge production.

By 2030, the research culture will undergo a transformative process towards openness, reusability, and replicability of research results, enhancing transparency, quality, and the efficiency of research. This transformation will enrich knowledge, accelerate innovation, and provide solutions to major societal challenges.

In 2030:

Open access to scientific publications resulting from research funded by national public funds becomes a common practice applied by researchers.

The scientific publishing system becomes more efficient and dynamic, benefiting from a transparent and equitable framework for the costs of open access publishing and access to international publications.

Research data management in accordance with FAIR principles is a standard for publicly funded research, and open data access is ensured while respecting the principle "as open as possible, as closed as necessary".

Digital infrastructures, services, and repositories for open science are developed to enable free access, visibility, sharing, reuse, and long-term preservation of research results in digital format.

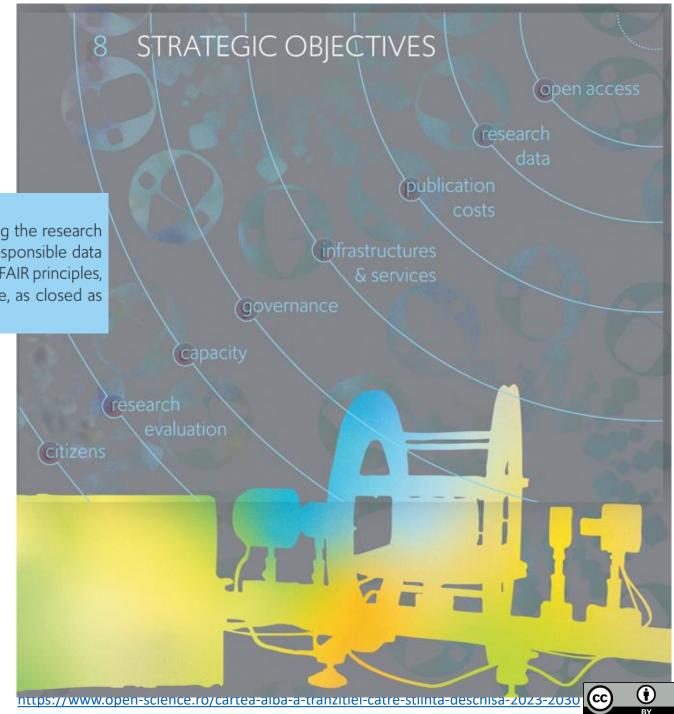
The evaluation of researchers' careers, research projects, and research institutions adapts to consider open science practices. The adoption of open science practices is not only encouraged and assessed but also professionally recognized and rewarded.

Citizens have access to scientific results and participate in various stages of the research process, such as data collection (citizen science), strengthening the relevance of research in addressing societal challenges and society's trust in science and innovation.

# White Paper on the Transition to Open Science (2023-2030)

#### Objective 2. Managing Research Data and Ensuring Open Data Access

Research data management should become a standard scientific practice during the research process when generating, collecting, or reusing data. Data management and responsible data handling should be based on a data management plan, ensuring compliance with FAIR principles, and open access should be provided while respecting the "as open as possible, as closed as necessary" principle.



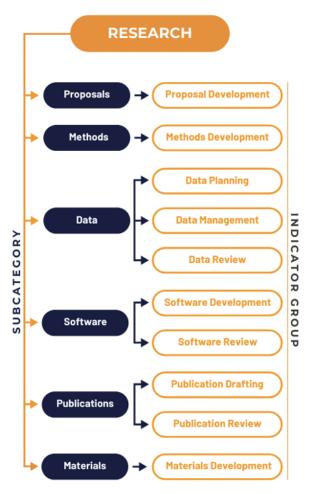
## O2. Research Data Management and Open Research Data

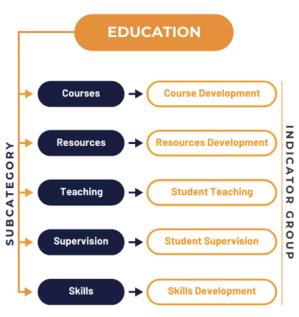
- **2.1.** The introduction of the mandatory development and continuous updating of data management plans, in compliance with FAIR principles and open access to data, starting with the new funding cycle, for all research projects that generate, collect, or reuse publicly funded data, and monitoring compliance with these requirements. It is recommended that the data management plan be openly accessible, except when legitimate reasons exist for keeping it confidential. If made public, it is recommended to apply the CC BY license to allow broad reuse.
- **2.2.** Ensuring open access to stored data as soon as possible and within the deadlines set in the plan through a digital repository<sup>34</sup> and applying the most recent available version (preferably) of the "Creative Commons Attribution International Public License" (CC BY or CCO) or an equivalent license. According to the provisions of Article 13 (1) of Law 179/2022 on open data and the reuse of information from the public sector, "open access policies respect the 'open by default' principle and are compatible with FAIR principles: findable, accessible, interoperable, and reusable, in accordance with the Marrakech Agreement establishing the World Trade Organization, ratified by Romania through Law no. 133/1994". "Ensuring open access to data is done in accordance with the principle of 'as open as possible, but as closed as necessary,' taking into account intellectual property rights, personal data protection, privacy, security, and legitimate commercial interests." This means that, as an exception, beneficiaries can or must keep certain data closed for justified reasons (explicitly stated in the data management plan).
- 2.3. Metadata related to stored data should be openly accessible under the "Creative Common Public Domain Dedication (CCO)" license or an equivalent, following FAIR principles (especially to make them "machine-actionable").
- **2.4.** Research data should adhere to FAIR principles and be easily identifiable through persistent and unique identifiers PID (most commonly using DOI Digital Object Identifier) and should be linkable to other datasets and publications through appropriate mechanisms<sup>35</sup>.
- **2.5.** Costs associated with the management of research data should be eligible in the funding contracts for publicly funded research projects.
- **2.6.** It is recommended to manage and provide open access to other research outcomes besides research data, such as software<sup>36</sup>, models, algorithms, workflows, protocols, simulations, electronic lab notes, in compliance with FAIR principles and open access (as far as possible).

## From policy to practice

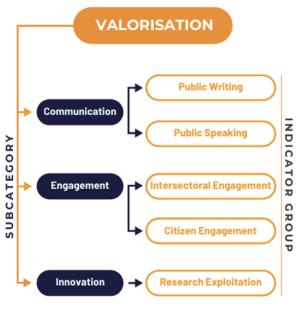
- DMPs requirements & RDM evaluation criteria PILOT (OPUS Project)
- Rethinking research assessment national discussion
- Data interoperability in health Veles Project
- Defining recommendation for Curricula & training to develop the OS (related) skills

## **OPUS Researcher Assessment Framework**















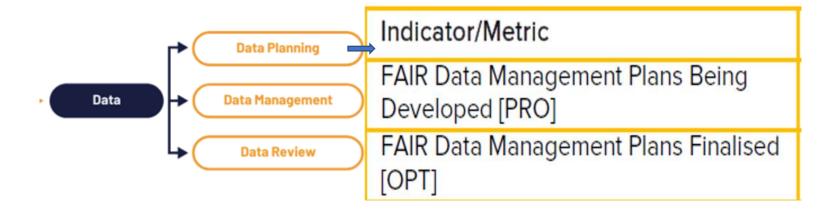
## **Broader aim**

- Support implementation of FAIR & OS at national level according to the national OS strategic framework
- Introduce OS & FAIR requirements in publicly funded research projects.

## **Scope of OPUS pilot**

The pilot at UEFISCDI is embedded in the **National Research**, **Development**, and **Innovation Funding Programme on 'Centres of Excellence'** 

Pilot duration: 18 months – starting Jan. 2024





# Centres of Excellence (CoE) funding call

230 mil. Euro budget The programme is expected to fund up to 20 projects

## Purpose

 Consolidation of Romanian scientific research by establishing partnerships in areas of demonstrated scientific excellence of research organizations, in order to form a critical mass of researchers and the interdisciplinarity needed to address some challenges from the Strategic Research Agenda.



## OS practices & RDM – part of Implementation requirements

## **Funding Application - PN-IV-PRO-CoEx-2024-1**

https://uefiscdi.gov.ro/resource-867720-Section-BCoEx.docx

- Describe how open science practices (e.g. Open Access to publications<sup>6</sup>, research data management, citizen science, and other<sup>7</sup> are implemented and show how their implementation is adapted to the nature of work, therefore increasing the chances of the project delivering on its objectives. If proposers believe that none of the open science practices apply to their project, please provide a justification.
- Describe the practices for research data management (RDM)<sup>8</sup> used in the project in line with FAIR principles (Findable, Accessible, Interoperable and Reusable). Should the proposal be funded, a plan for data management (DMP Data Management Plan) will be developed in the consortium within the first 6 months of implementation.



## Evaluation sheet

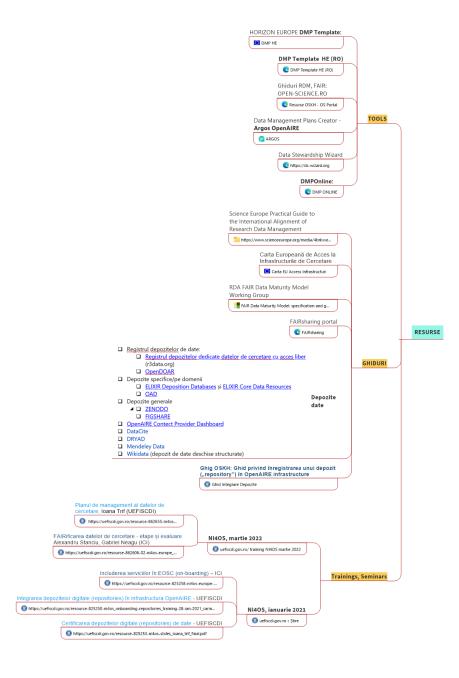
https://uefiscdi.gov.ro/resource-867381-Fisa-evaluareCoEx.pdf

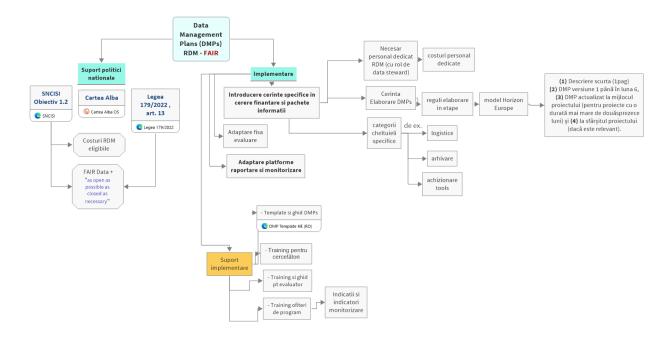
## Criterion 3: Implementation

(20%)

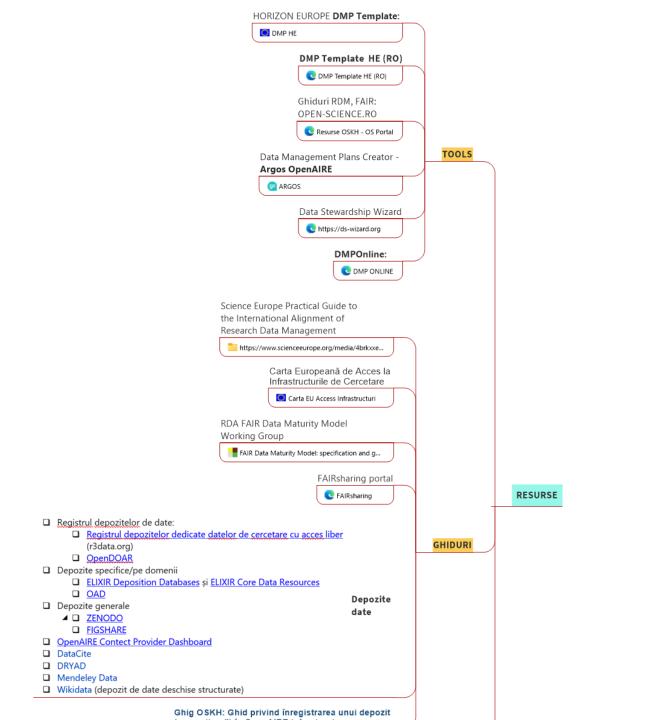
## Work plan and schedule

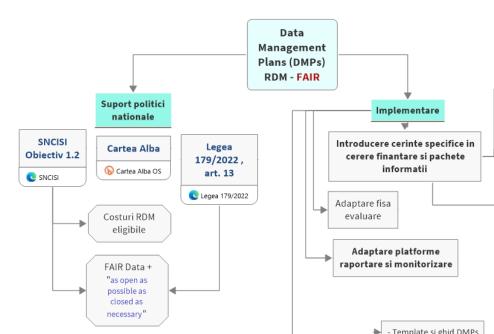
- the expertise level of researchers nominated in the project team is good and well-correlated with their contribution in the project;
- the proposed activities, deliverables and milestones are well structured and ensure the achievement of the proposed objectives and expected results, with adequate means of verification and contingency plans;
- the responsibilities of the people involved are adequately described, including new necessary staff positions;
- the Gantt diagram is realistic;
- the research agenda is updated based on public consultation with industry, NGOs, citizens and public authorities as potential users of the research results;
- the Open Science practices are well demonstrated;
- the research data management is convincing and in compliance with the FAIR principles;
- throughout the project implementation, gender equality, inclusion and diversity are ensured by all organisations involved in the consortium;
- the ethical issues are appropriately addressed (if applicable).





#### **Implementation** steps Data **Policies** Management Plans (DMPs) Necesar RDM - FAIR costuri personal personal dedicat dedicate RDM (cu rol de Suport politici data steward) Implementare nationale (1) Descriere scurta (1pag) (2) DMP versiune 1 până în luna 6, **SNCISI** Introducere cerinte specifice in Cerinta Legea (3) DMP actualizat la mijlocul Cartea Alba reguli elaborare model Horizon Obiectiv 1.2 Elaborare DMPs cerere finantare si pachete 179/2022, proiectului (pentru proiecte cu o in etape Europe informatii (b) Cartea Alba OS art. 13 durată mai mare de douăsprezece C SNCISI luni) și (4) la sfârșitul proiectului categorii C Legea 179/2022 (dacă este relevant). Adaptare fisa cheltuieli ▶ logistice Costuri RDM evaluare specifice eligibile → arhivare Adaptare platforme raportare si monitorizare FAIR Data + achizionare "as open as possible as tools closed as necessary" → - Template si ghid DMPs DMP Template HE (RO) **Trainings – capacity** Training pentru consolidation/building cercetători Suport implementare - Training si ghid pt evaluator Indicatii si indicatori - Training ofiteri monitorizare de program





## Future steps



## **Rethinking Research Assessment Conference**

14 Nov 2024

## Future steps

- FAIR DMPs guides (beginning of 2025)
- DMP template & guides consultation with researchers (march 2025)
- Training session with researchers (spring 2025)
- Hands-on workshop with staff
- Awareness raising session

HE Data Management Plan Template

Science Europe Practical Guide to the International Alignment of Research Data Management

DMP feedback/ co-creation?

## Piloting a new researcher profile - Openess Profile



## INSIDE STORIES FROM THE PILOT STUDIES

Rethinking Research Assessment - a comprehensive Researcher profile for a broader and more personalised representation of researchers' contributions to science



UB fiscoli

Executive Agency for Higher Education, Research, Development and Innovation Funding

https://graspos.eu/rethinking-research-assessment-a-comprehensive-researcher-profile

## **VELES Excellence Hub**

Strengthening the South-East Europe Smart Health Regional Excellence and Boosting the Innovation Potential

# On a Mission to Transform the Smart Health Landscape in South-East Europe

We're pioneering the European Health Data Space by building the first Regional Smart Health Data Space.

https://veleshub.eu



**FIND OUT MORE** 

## Defining recommendation for Curricula & training

**Education and Employment Program (PEO)** 

Increasing the relevance of education and training systems for the labor market, in the context of the use and development of digital and entrepreneurial skills and the promotion of a stimulating environment for lifelong learning.

**PROJECT:** Adapting the educational offer to labor market demands through evidence-based policy making.

Research on the development of emerging skills, competencies, and professional profiles necessary for open science (A4.4, 18 months).

1) Analysis of policies and practices (both nationally and internationally) regarding the development of skills and competencies necessary for open science: managing FAIR scientific information, open access to research results, the use of specific standards and protocols, management of open educational resources, etc.;

- 2) Analysis of the current state of skills and existing educational and training offerings at the national level relevant for training specialists—such as IT experts in data-intensive computing, technicians, engineers, and data administrators (data stewards, data curators, etc.);
- 3) Co-creation of recommendations for a competency framework needed for open science: building the skills & capacities for students, researchers, academic and research institution staff, and other relevant actors in the private and public sectors, as well as civil society, to implement open science [alignment with international provisions and SNCISI 01.2, "The White Paper on the Transition to Open Science"].



Currently – over 1000 members





# Join Open-Science Community in BrainMap









## The online community of researchers, innovators, technicians and entrepreneurs 62.526 accounts



We connect your expertise to Romania, for your voice to matter



Romanian language

Explore by Skills







## Mrs. Alina IRIMIA

PhD



**UEFISCDI ID (UEF-ID):** 

U-2300-070A-3192

Romania

SKILL TAG

SKILL MAP RESEARCH OUTPUTS

## **Brainmap Communities**

**Open-Science Community** 

Join Diaspora Community



## **Community updates**

## **Latest Open-Science events**

Rethinking Research Assessment Conference

Romania National Roadshow

Adunarea Generală RO-NOSCI

## **Latest Open-Science topics**

Citizen Science

Open Access (OA)

<u>Data Management Plan (DMP)</u>



Customize your account information by adding yo

Brainmap Communities

Open-Science Community
\*click to see current members

News Workingspace Events

Admin news Admin workingspace Admin events



This section provides a selection of the most relevant news or reference documents related to Open Science, thus facilitating the access to information and knowledge on the subject.



#### Pilot Romania - GraspOS

GraspOS prezintă constant informații despre ce reprezintă activitățile pilot desfășurate în cadrul proiectului și despre modul în care acestea urmăresc să aducă împreună știința deschisă și evaluarea cercetării.

Povestile din interior oferă o perspectivă asupra studiilor pilot



#### e-Infrastructurile europene anunță o colaborare în vederea consolidării sprijinului pentru cercetare

Principalele organizații europene de e-infrastructură, inclusiv EGI, EUDAT, GÉANT, OpenAIRE și PRACE, au semnat în data de 3 octombrie 2024 - un memorandum de înțelegere (MoU) în cadrul conferinței EGI 2024, înființând Adunarea europeană a e-infrastructurilor. Această colaborare urmăreste să consolideze



#### Eveniment de lansare tehnică a nodului UE EOSC

Direcția Generală Cercetare și Inovare (DG RTD) și Direcția Generală Rețele de comunicații, conținut și tehnologie (DG CNECT) ale Comisiei Europene organizează un eveniment de lansare tehnică a nodului EOSC EU, online, în data de 10 octombrie 2024, între orele 9.30 - 13.15 CEST.

Evenimentul de lansare online se va axa pe o demonstrație tehnică a nodului EOSC EU.

Informații suplimentare pot fi accesate aici.

Read more



#### Program pilot de formare pentru Open Access

Proiectul <u>PATTERN</u> va organiza în perioada 28-30 Octombrie 2024, un program de formare (online) privind cercetarea și inovarea deschisă și responsabilă (RRI).

Participanții la acest program vor învăța despre:

- · Publicarea cu acces liber: modalități de depășire a provocărilor.
- · Cum se pot păstra drepturile de autor și cum se poate maximiza impactul în cadrul publicării cu acces liber.

Dublicaroa cu accos libor poptru a răcpundo actoptărilor

#### Read more





#### Join the PATTERN Pilot Training Program for FAIR RDM

11-15 November 2024

## Program pilot de formare pentru gestionarea FAIR a datelor de cercetare (RDM)

Proiectul PATTERN va organiza în perioada 11-15 Noiembrie 2024, programul de formare cu privire la gestionarea FAIR a datelor de cercetare (RDM).

Participanții la acest program vor învăța despre:

- Principiile fundamentale ale FAIR RDM şi de ce sunt esenţiale pentru o cercetare cu impact.
- · Cum să dezvolți planuri solide de gestionare a datelor (DMP) pentru planificarea practicilor FAIR.

Read more



## Science Europe "Developing and Aligning Policies on Research Software"

Science Europe a publicat recent documentul "Developing and Aligning Policies on Research Software: Recommendations for Research Funding and Research Performing Organisations".

Obiectivul acestor recomandări este de a contribui la un cadru politic mai solid pentru software-ul de cercetare.

Raportul integral poate fi accesat aici.

#### Read more







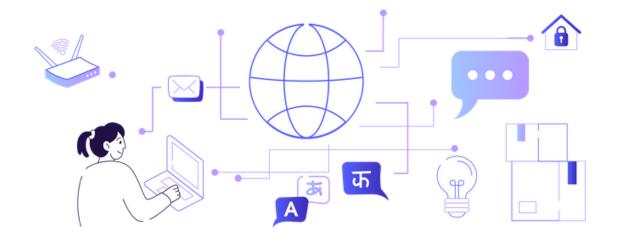


## brainmap

Brainmap Communities

## Open-Science Community \*dick to see current members

News Workingspace Events



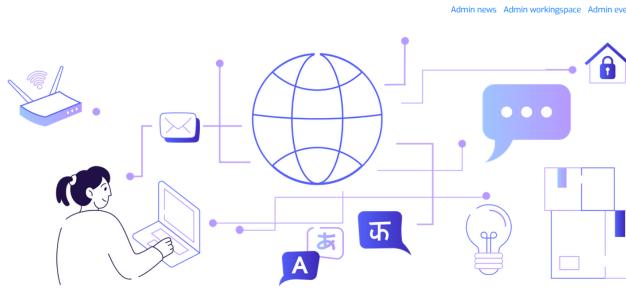






#### Open-Science Community

\*click to see current members



This section provides a selection of the most relevant topics related to Oper Science. Community members may contribute to this section, by adding comments insights or links to relevant materials associated to each topic.

# This has 6 resources See resources and discussion

#### Open Access (OA)

This has **8** resources

#### Research data management (RDM)

This has **2** resources

See resources and discussio

See resources and discussion

News Workingspace Even

#### Citizen Science

This has **9** resources

See resources and discussio

Research Assessment

## **Events**

Relevant events national & international

Open-Science Community
\*click to see current members

News Workingspace Events

 $\triangleright$ 

Admin news Admin workingspace Admin events

Octombrie 2024

Luni	Marţi	Miercuri	Joi	Vineri	Sâmbătă	Duminică
	01	02	03	04	05	06
07	08 Romania National Roadshow	09	10	11	12	13
14	15	16	17	18	19	20
21	22	2024 International Conference Advanced Scientific Computing - ICASC	2024 International Conference Advanced Scientific Computing - ICASC	2024 International Conference Advanced Scientific Computing - ICASC	26	27
28	29	30	31			

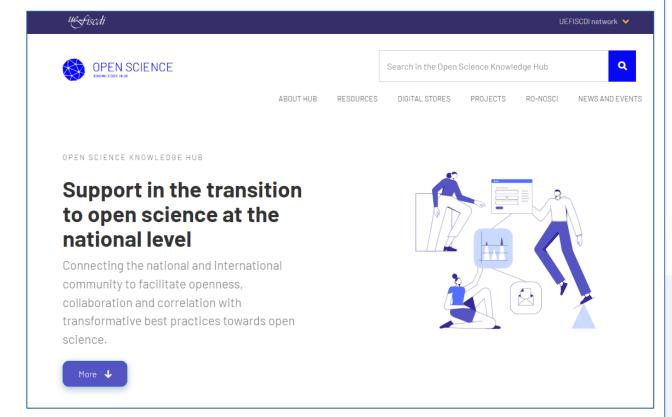
This section provides a selection of the most relevant events related to Open Science.

#### **Upcoming events**

#### UEFISCDI Conference 2024 Rethinking Research Assessment – 14 November 2024

The Executive Agency for Higher Education, Research, Development and Innovation Funding (<u>UEFISCDI</u>), together with the Open and Universal Science project (<u>OPUS</u>), <u>Science Europe</u>, Coalition for Advancing Research Assessment (<u>CoARA</u>) and the <u>UNESCO Chair on Science and Innovation Policies</u> – SNSPA, organizes the international Conference 'Rethinking Research Assessment', which will take place in *Bucharest*, *Romania*, *on November 14*, *2024*.

The event aims to address the pressing need for innovation in research assessment, and to approach the latter topic from a three-dimensional perspective - policies for research assessment, research assessment and last but not least, organizations' perspectives on research assessment.





utare in Open Science Knowledge Hub

NOCCI CTID

RE HUB RESURSE

DEPOZITE DIGITALE

PROIECTE

RO-NOSCI

STIRI SI EVENIMENTE

OPEN SCIENCE KNOWLEDGE HUB

## Biblioteca Open Science

Secțiunea pune la dispoziție o selecție de documente de referință, revizuite și actualizate în funcție de dinamica internațională și documente suport elaborate de către Open Science Knowledge Hub





#### Categorii documente

Stiinta deschisă în Orizont Europa
Rapoarte Comisia Europeană
Inițiative strategice relevante
Documente OSKH RO
Regulamente europene
Recomanări strategice și politici
Studii și analize

<u>Directive europene</u> <u>Articole și cărți</u>

Rapoarte europene și internaționale Declarații și manifeste Ghiduri și documente informative Elaborarea și alinierea politicilor privind software-ul de cercetare: Recomandări pentru finanțarea cercetării și organizațiile care desfășoară activități de

cercetare



The White Book of the Transition to Open Science



Ghid pentru implementarea strategiei de păstrare a drepturilor de autor pentru publicatiile stiintifice



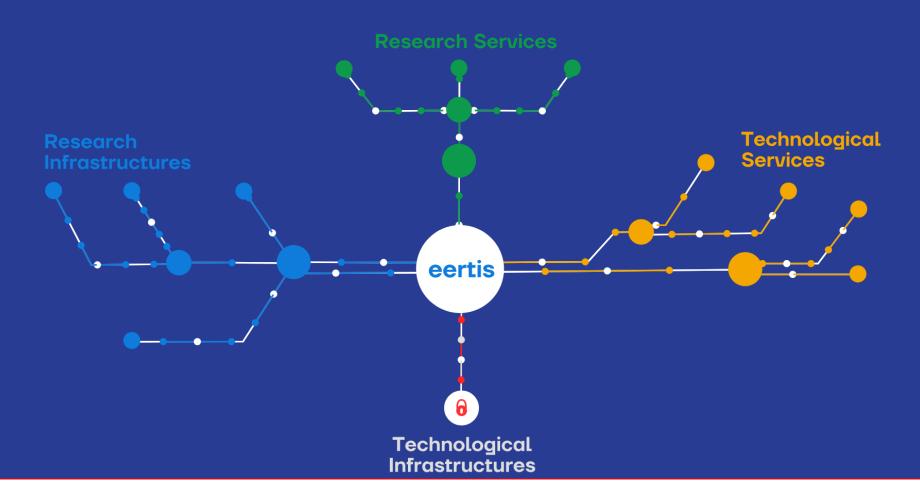








# Engage in the European Research and Technology Infrastructures System





# **Explore eertis**

https://eertis.eu/ Explore what the Research and Technology Infrastructures have to offer. Their resources are one click away.

## **Statistics**



## **Research Infrastructures**



2.909



## **Research Services**

7.291



## **Technology Services**

481



## **Equipment**

27.391

# International collaboration Relevant WGs & initiatives





#### **FAIR & EOSC related**

Part of the <u>FAIR-IMPACT</u> project (support for FAIR Implementation)

Observer in the EOSC Association

Co-coordinator of the Romanian Open Science Cloud Initiative (RO-NOSCI) (NI4OS – Europe project)

Collaboration with Research Data Alliance (RDA) – support for open reseach data & EOSC (OSKH is RDA node)

Support for infrastructure & services for open science OpenAIRE NOAD Romania











## International collaboration **Relevant WGs & initiatives**

**OS & Research Assessment** 

**UEFISCDI** 

51 early signatories of CoARA

WG: Improving practices in the assessment of research proposals (Europen Commission)

**WG: Towards Open Infrastructures for Responsible Research** 

**Assessment (OpenAIRE)** 

**DORA** signatory

Science Europe (WG on OS, WG Research Culture, TF on Recognition Systems, TF on Open Research Software; TF on EOSC)

OPUS (Open Universal Science) project

GraspOS project: next Generation Research Assessment to Promote Open Science























## Questions/ Discussion

Thank you!

Alina.Irimia@uefiscdi.ro

in www.linkedin.com/in/alina-irimia



