Building Open Science Capacity through European Collaboration: The Open4UA Approach to Research Reform in Ukraine

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Ukraine's Open Science Journey

OS has become a strategic priority for Ukraine's modernization of higher education and research and it’s integration into the European Research Area.

The adoption of the **National Open Science Plan (2022)** established a national framework for advancing openness, transparency, FAIR data practices, and responsible research assessment.



National Open Science Plan (2022)

Main Objectives:

16 activities till 2030

- Ensuring OA to **research results** and scientific and technical information
- Ensuring OA to **research infrastructure**
- Creating the conditions **for effective work** with scientific and technical information and research infrastructures in OA
- **Popularisation of science**, disseminating scientific knowledge, and encouraging **citizens** to participate in scientific and technical activity
- Improving **research assessment** and scientific and technical activities quality evaluation
- Awareness raising and capacity building on **OS skills** and competencies

Source

Ukraine's Open Science Journey

Since 2022, Ukrainian research institutions have faced major disruption, including researcher displacement, damaged infrastructure, and interrupted research activities.

These challenges highlighted the value of **open, collaborative, and digitally enabled research ecosystems**.

Key barriers remain:

- Limited Open Science incentives
- Insufficient training and support
- Fragmented infrastructures
- Traditional research assessment systems

Progress requires **coordinated action** across policy, infrastructure, research assessment, capacity building, and international collaboration.

Open4UA Project

https://lpnu.ua/open4ua

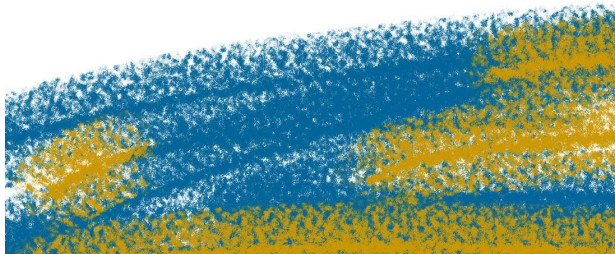
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Full title: Open Science for Ukrainian Higher Education System
Funding program: ERASMUS-EDU-2023-CBHE-STRAND-3

36 months (1.11.2023 - 30.10.2026)
Coordinator – Lviv Polytechnic National University

Project objective: Promoting the growth of Ukraine's knowledge economy for post-war recovery by reforming the higher education system to prioritize open science at the national, institutional, and individual levels.

The project is directly focused on the implementation of the National Plan for Open Science, in particular its task No. 5 "Improving the system of quality assessment of scientific and scientific and technical activities".




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KNOWLEDGE WITHOUT BOUNDARIES

PARTNERS

Open4UA

Strong connection with Ukrainian authorities and early involvement in policymaking



Joint workshop of the Ministerial WG on RA at the institutional level, Open4UA consortium including CoARA National Chapter representatives – Jan 24, 2024

1. National Legislative Reform on Open Science

Objective: Fostering a national consensus to modernize the higher education system through official policy.

Core Tasks: Developing a **draft Law of Ukraine** to amend national legislation regarding state policy in the field of Open Science, aligning it with European Research Area (ERA) standard methodologies.

Lead/Key Partners: Yaroslav Mudryi National Law University.



OPEN4UA PROJECT / DELIVERABLE 3.1

Draft Law of Ukraine Amending Legislation on National Open Science Policy

Проєкт Закону України про внесення змін до деяких законодавчих актів щодо реалізації концепції відкритої науки

– REPORT –

Date of publication: 25.04.2025

Authors: *Dmytro Luchenko, Bohdan Karnaukh, Nataliia Filatova-Bilous, Tetiana Tsuvina, Andriy Yevkov, Inesa Shumilo*

Co-funded by the European Union

https://doi.org/10.5281/zenodo.15441719

2. Advanced Research Assessment & Funders Framework

Objective: Reforming research evaluation at the state level to prioritize OS practices.

Core Tasks: Integrating Coalition for Advancing Research Assessment (CoARA) and DORA principles into state certifications and funding evaluations. This includes developing an **open database of projects** funded by the National Research Foundation of Ukraine (NRFU) to drive transparency.

Lead/Key Partners: National Research Foundation of Ukraine



OPEN4UA PROJECT / DELIVERABLE 4.1

Recommendations for the Implementation of CoARA Principles in the Policies and Practices of Evaluating Projects by National Funders

Рекомендації щодо впровадження принципів CoARA в політики та практики оцінювання наукових проєктів національними надавачами коштів

– REPORT –

Date of publication: 31.10.2025

Authors: ***Olga Polotska, Andrii Kuznetsov, Tetiana Machulina, Nadiia Lytvynova, Tetiana Beregova, Roman Palii, Oleksandr Berezko***

Co-funded by the European Union

https://doi.org/10.5281/zenodo.17566526

3. Institutional Toolkit for OS

Objective: Developing practical toolkits to help university leadership manage and reward open science practices locally.
Core Tasks: Building and piloting an **institutional toolkit** for OS implementation and research data management (including defining roles like Data Stewards) across individual Ukrainian universities.
Lead/Key Partners: National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"



OPEN4UA PROJECT / DELIVERABLE 5.1

Institutional Toolkit for Open Science Implementation and Research Assessment Advancement
Інституційний інструментарій для впровадження відкритої науки та розвитку оцінювання наукових досліджень

– REPORT –

Date of publication: 30.04.2025

Authors: *Georgii Vasyliev, Evgeniia Kulyk, Vitalii Pasichnyk, Oleksandr Berezko, Viktoria Vorobyova, Ivan Pyshnograiev, Igor Vladymyrskyi, Oksana Yurchishin, Anna Sobetska*

Co-funded by the European Union

https://doi.org/10.5281/zenodo.15293056

4. Knowledge Transfer & Capacity Building

Objective: Bridging European best practices with Ukrainian academia through active training.

Core Tasks: Conducting peer-to-peer workshops, staff training, and knowledge-sharing seminars hosted by EU expert institutions to build regional capacity in research data management.

Lead/Key Partners: University of Ljubljana, TU Delft, and Université libre de Bruxelles.



OPEN4UA PROJECT / DELIVERABLE 2.4

Recommendations for the Open Science and Research Assessment reforms in Ukraine

Рекомендації щодо реформ із впровадження відкритої науки та оцінювання наукової діяльності в Україні

– REPORT –

Date of publication: 10.05.2024

Authors: Sebastian Dahle, Oleksandr Berezko

Co-funded by the European Union

https://doi.org/10.5281/zenodo.15752905

ROLE of UL

UNIVERZA V LJUBLJANI
University of Ljubljana

1. Work Package Leadership & Legislative Mentoring

It leverages the experience of Slovenia's own National Open Science strategy and legislative reforms to help the Ukrainian Ministry of Education and Science shape its new framework policies and draft laws.

2. Practical Expertise via Dedicated Data Infrastructure

The university provides deep operational expertise through its specialized departments and associated partners:

- **Slovenian Social Science Data Archives (ADP):** serves as a template for Ukrainian institutions regarding repository governance, FAIR data implementation, and reproducibility workflows.
- **Central Technical Library (CTK):** Acting as an associated partner, the library supports training on Open Access mechanisms and institutional repository integration.

ROLE of UL

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3. Hosting Hub for Intensive Capacity Building Seminars

UL acts as a major physical and digital knowledge-transfer hub, hosting multiple high-level training segments for Ukrainian university leaders and the National Research Foundation:

- **April 2024 Seminars:** Focused on national policy formulation and aligning project evaluations with CoARA and DORA principles.
- **June 2025 Toolkits Seminar:** Hosted a cross-consortium session where Ukrainian institutions presented and refined their newly co-created localized Open Science institutional toolkits.

4. Cross-Project Knowledge Transfer

The university links Open4UA outcomes to broader regional initiatives, such as Slovenia's national **SPOZNAJ project** (Support for the Implementation of Open Science Principles).







More info:
https://lpnu.ua/en/open4ua/results-2025-training-course

5. Dissemination, Exploitation & Advocacy

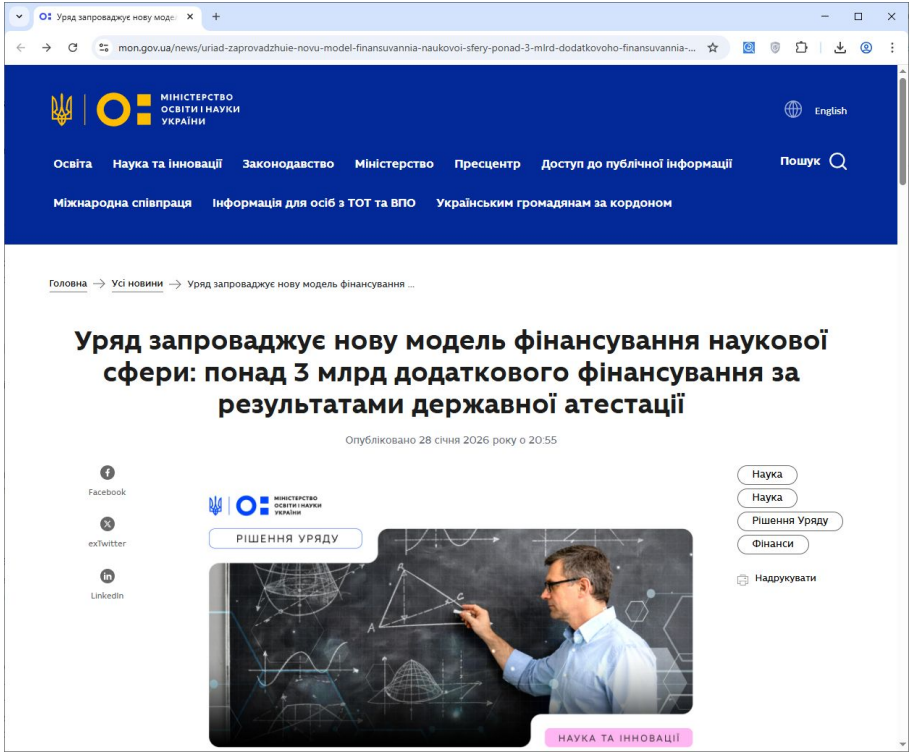
Objective: Guaranteeing the widespread adoption of project outputs across all sectors of the UA academic community.

Core Tasks: Organizing major public milestones like the **National Forum on Open Science and Advancing Research Assessment** in Kyiv and distributing evidence-based policy recommendations.

Lead/Key Partners: Coordinated across the consortium with strong support from international networks like Eurodoc.

More info





https://mon.gov.ua/news/uriad-zaprovadzhuie-novu-model-finansuvannia-naukovoi-sfery-ponad-3-mlrd-dodatkovoho-finansuvannia-za-rezultatamy-derzhavnoi-atestatsii

28 January 2026 – Ukrainian Government Approved a Decree on Performance-Based Research Funding

The government is introducing a new model for financing the scientific sector: over 3 billion in additional funding based on the results of state certification.

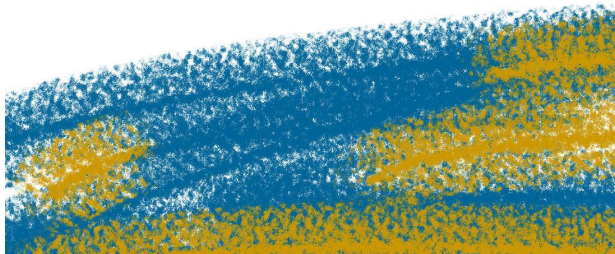
Open4UA – conclusions

As a result of discussions at the seminars, we concluded that open science practices are largely:

- intertwined with **research integrity**,
- linked to overcoming the **reproducibility crisis**, and
- closely related to improving both **research assessment** practices and
- **research culture**.

Therefore, we do not draw separate conclusions about evaluation practices or open science, but offer joint recommendations for shaping the academic environment in light of current practices and insights.

Co-funded by the European Union



The ADMIDE project

Erasmus+ Capacity Building in Higher Education (CBHE)

Advancing Research Assessment and Open Science Reform in Ukraine

Supporting Ukraine's transition to a **knowledge-driven economy** through higher education reform and advanced **Data Management & Data Stewardship (DM&DS)**.

National Reform & EU Integration
- Support higher education modernization
- Contribute to accreditation reforms
- Align with EU standards and integration

Institutional Capacity & Infrastructure
- Strengthen univ. data management capacity
- Develop recomm. and implementation mechanisms
- Modernize research data infrastructure

Skills, Integrity & Reproducibility
- Mainstream DM&DS practices across Ukrainian HEIs
- Train Data Stewards and data professionals
- Enhance research integr. and reproducibility

Supporting sustainable, system-wide reform of research and higher education in UA.

"Ukraine's Open Science journey is not merely a story of digital transformation, but a story of resilience, reform and international cooperation."

Thanks for your attention!

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