

Open and Universal Science Project (OPUS)

**OPUS helps reform the
assessment of research towards
a system that incentivise
researchers to practice
#OpenScience**



WP4 ACTION PLANS TO IMPLEMENT THE PILOTS - Final

Deliverable 4.3: Action Plans to Implement the Pilots – Final

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Responsibility

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ABBREVIATIONS AND ACRONYMS

| Abbreviations and Acronyms | Full Name |
|----------------------------|--|
| APC | Article Processing Charges |
| APs | Action plans |
| BPC | Book processing charges |
| CC | Creative Commons |
| CRIS | Current Research Information System |
| COZ | Centre for the Promotion of Open Science, University of Rijeka |
| DMP | Data Management Plan |
| ECR | Early career researcher |
| eLABa | Lithuanian Academic Electronic Library |
| EOSC | European Open Science Cloud |
| FAIR | Findable, Accessible, Interoperable, and Reusable |
| FCCN | Fundação para a Computação Científica Nacional, Scientific Computing Unit of FCT |
| FCT | Foundation for Science and Technology |
| FTE | Full time equivalent |
| GHTM | Global Health and Tropical Medicine Research Centre |
| ICoRSA | International Consortium of Research Staff Association |
| IP | Intellectual Property |
| KIOS COE | KIOS Research and Innovation Centre of Excellence |
| KTU | Kaunas University of Technology |
| LABIIMSPPK | Lithuanian Research Library Informational Research and Study Infrastructure Maintenance and Development Consortium |
| LIDA | Lithuanian humanities and social sciences research data archive |
| LMBA | Lithuanian Research Library Consortium |
| M | Month |
| MagIC | Information Management Research Centre |
| MCAA | Marie Curie Alumni Association |
| MIDAS | National Open Access Research Data Archive |
| MCID | Ministry of Research, Innovation and Digitalisation |
| MT | Management team |
| NCP | National Contact Point |
| NCSHETD | National Council for Science, Higher Education, and Technological Development |
| OA | Open Access |
| OCM | Outcome |
| OPT | Output |
| OPUS | Open Universal Science |
| OS | Open Science |
| OSKH | Open Science Knowledge Hub Romania |
| OSRL | Open Science Readiness Level |
| PCDP | Professional Career Development Plan |
| PI | Principal Investigator |
| PO | Programme Operator |
| PRAVRI | University of Rijeka Faculty of Law |
| PRO | Process |
| RAF | Researcher Assessment Framework |
| RCL | Research Council of Lithuania |
| RDI | Research, Development and Innovation |
| RDM | Research Data Management |
| RFO | Research-funding Organisation |
| RISS | Research and Innovation Support Service |
| ROARMAP | Registry of Open Access Repositories Mandatory Archiving Policies |
| RPO | Research-performing Organisation |
| RUN | NOVA University Repository |
| SOCRI | Science Outreach Centre |
| SU | Stockholm University |
| TBD | To Be Determined |
| TGB | Technopolis Group Belgium |

| Abbreviations and Acronyms | Full Name |
|----------------------------|--|
| UCY | University of Cyprus |
| UEFISCDI | Executive Agency for Higher Education, Research, Development, and Innovation Funding |
| UGIC | Scientific Information Management Unit |
| UNIRI | University of Rijeka |
| UNL | NOVA University of Lisbon |
| UQAE | Quality, Accreditation and Employability Unit |
| VU | Vilnius University |
| WP | Work Package |
| UCY | University of Cyprus |

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Executive summary:

This document updates D4.1 *Action Plans to Implement the Pilots – Initial*¹. After the first 9 months of pilot implementation (18 months in total), it presents the revised action plans of the Pilot Organisations for the second stage of implementation. As a replacement for D4.1, this deliverable is written in the future tense and does not include reporting/monitoring considerations, which are covered in D2.3 and D2.4 for the intermediate and final evaluations of the interventions, and in D3.3 and D3.4 for the evaluations of the indicators. Instead, this report provides the most updated information on the selected indicators (including baselines and targets) and the interventions (including baseline and targets) designed to implement those indicators. A monitoring plan has been established to track progress, and bimonthly mutual learning sessions are planned to facilitate the exchange of experiences among the pilots.

1. Introduction

The present document includes the five revised action plans elaborated by the Pilot Organisations of the OPUS project. The introduction section provides background information on the deliverable (1.1) and the methodology carried out for its completion (1.2).

1.1 Background of the deliverable

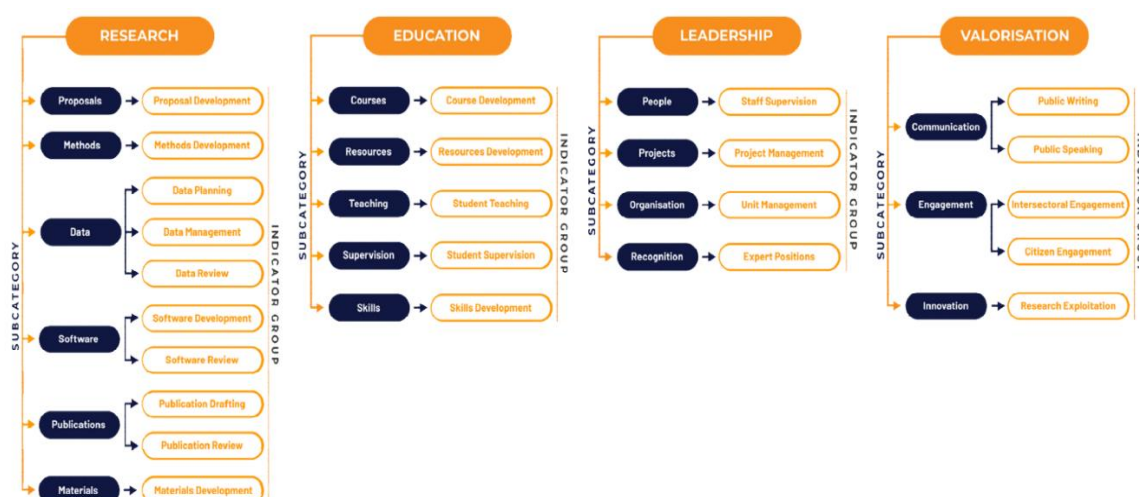
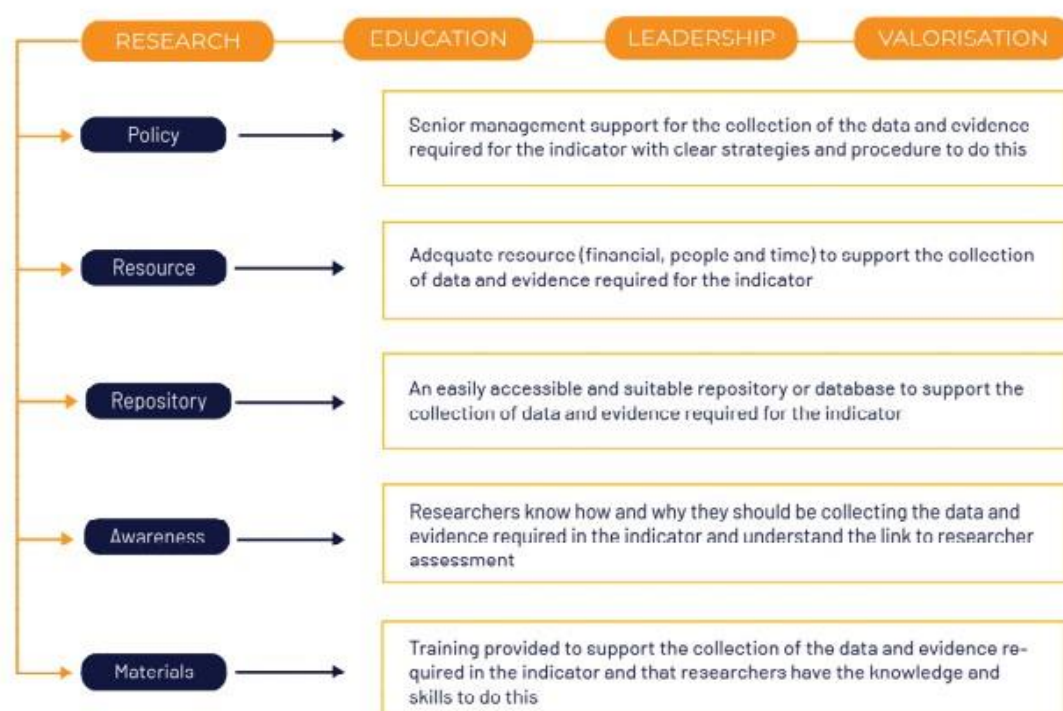
The **OPUS project**² is developing coordination and support measures for organisations to reform research assessment with a focus on recognising and rewarding researchers who contribute to Open Science (OS). The main aim of the project is to develop a framework for researcher assessment, consisting of indicators with a focus on OS, and corresponding interventions for organisations to implement the framework. The framework i.e., the Researcher Assessment Framework, hereafter the RAF and its supporting interventions **will be tested in pilots** and refined in consultation with the research community. Greater insights on the first draft of the RAF and its related interventions to support its implementation at research-performing organisations (RPOs) and research-funding organisations (RFOs) can be found in deliverable (D) D3.1 on *Indicators and Metrics to Test in the Pilots*³, and D2.1 on *Interventions to Test in the Pilots*⁴. See *Figure 1* and *Figure 2*, for a high-level visual of the RAF and the interventions.

¹ Zorrhino, Andrea & Vega Rubio, Raquel (2023) D4.1 Action Plans to Implement the Pilots – Initial Deliverable D4.1 of the Open Universal Science (OPUS) project.

² Webpage of the Open Universal Science (OPUS) project on CORDIS. Link: <https://cordis.europa.eu/project/id/101058471> (last accessed 27/10/2023)

³ O'Neill, Gareth (2023) Indicators and Metrics to Test in the Pilots. Deliverable D3.1 of the Open Universal Science (OPUS) project.

⁴ Day, Emma (2023) Interventions to Test in the Pilots. Deliverable D2.1 of the Open Universal Science (OPUS) project.

Figure 1: Categories, subcategories and Indicator Groups of Researcher Assessment Framework**Figure 2:** Intervention Categories to Support RAF and OSCAM

This **report** is D4.3 of the OPUS project on *Action Plans to Implement the Pilots – Final* and has been elaborated in the framework of Work Package (WP) 4, Pilots to Implement and Monitor Open Science. It serves as a **revision** of D4.1 *Action Plans to Implement the Pilots – Initial*⁵. The pilots are designed to run from month 17 of the project (January 2024) to month 34 of the project (June 2025), for a total of 18 months. The three RPOs (UNL, UCY, and UNIRI) and two RFOs (UEFISCDI and RCL) have selected and tailored indicators from D3.1 and corresponding interventions from D2.1 to test in each of their pilots (see Table 1.1).

⁵ Zorrhino, Andrea & Vega Rubio, Raquel (2023) D4.1 Action Plans to Implement the Pilots – Initial Deliverable D4.1 of the Open Universal Science (OPUS) project.

Table 1.1: Pilot Organisations in the OPUS Project

| Pilot # | Organisation | Acronym | Country |
|----------|---|----------|-----------|
| Pilot #1 | Nova University of Lisbon ⁶ | UNL | Portugal |
| Pilot #2 | University of Cyprus ⁷ | UCY | Cyprus |
| Pilot #3 | University of Rijeka ⁸ | UNIRI | Croatia |
| Pilot #4 | Executive Agency for Higher Education, Research, Development, and Innovation Funding ⁹ | UEFISCDI | Romania |
| Pilot #5 | Research Council of Lithuania ¹⁰ | RCL | Lithuania |

This document contains the revised **action plans** including the actions that will be carried out by the pilots in order to implement the interventions selected by each and has been developed in collaboration with them. All the changes included in the revised version of the action plans (see section 2) are **highlighted in orange** and are supported by Annex II. This annex compiles all the changes made to each of the five action plans and the **reasons for the modifications**.

Alongside the implementation of the pilots, and as part of WP4's Task 4.2 'Mutual Learning to Support the Pilots,' **mutual learning bimonthly sessions** are conducted to support the Pilot Organisations during implementation while providing a platform for sharing and learning from one another's experiences. These sessions also provide recommendations for other potential organisations interested in piloting the RAF and its related interventions (D4.2 on *Mutual Learning Exercise on the Pilots – Initial* and D4.4 on *Mutual Learning Exercise on the Pilots – Final*).

In parallel, a **co-monitoring plan** will evaluate the progress of the pilots: an intermediate evaluation of the indicators and interventions is slated for M9 of the pilots, facilitating reflection on necessary adjustments, followed by a final evaluation at the end of the pilots, which will determine whether the targets were achieved (D2.3 and D2.4 provide information on the intermediate and final evaluations of the interventions, and D3.3 and D3.4 on the intermediate and final evaluations of the indicators). A monthly monitoring report is to be submitted to WP4's Teams channel per pilot in order to track progress and inform the bimonthly mutual learning sessions.

1.2 Methodology

The Pilot Organisations were involved in the co-creation of the RAF and its related interventions (see D2.1 and D3.1). Once the RAF and its accompanying interventions were fully developed, the process leading up to the final selection of indicators and interventions to test in the pilots was initiated.

It shall be noted that prior to the selection process, the senior management of each of the Pilot Organisations defined the **scope** of their pilots. This meant identifying the piloting unit within the organisation for RPOs, or the funding programme for RFOs, as well as the cohort of researchers for the pilot.

During the selection process, regular exchanges of information among the organisations and the leaders of WP2 (interventions), WP3 (indicators) and WP4 (piloting) were required. Internal coordination within the Pilot Organisations in order to align with senior management was also essential.

Starting by the **indicators**, Pilot Organisations made their selection with a focus on the OS dimension of the RAF in D3.1. Given the high-level nature of the RAF, Pilot Organisations were required to further refine their choices based on feasibility and the strategic interests and priorities of their organisations, excluding those indicators already in use. Please refer to Annex I for a high-level visual of the different categories, subcategories and indicator groups of the RAF. The Pilot Organisations then selected **interventions** supporting the implementation of the indicators they had previously selected (from the suite of options

⁶ Website of Nova University of Lisbon (UNL). Link: [<https://www.unl.pt>] (last accessed 15/11/2023)

⁷ Website of University of Cyprus (UCY). Link: [<https://www.ucy.ac.cy/>] (last accessed 15/11/2023)

⁸ Website of University of Rijeka (UNIRI). Link: [<https://uniri.hr/>] (last accessed 15/11/2023)

⁹ Website of Executive Agency for Higher Education, Research, Development, and Innovation Funding (UEFISCDI). Link: [<https://uefiscdi.gov.ro/>] (last accessed 15/11/2023)

¹⁰ Website of Research Council of Lithuania (RCL). Link: [<https://www.lmt.lt/>] (last accessed 15/11/2023)

included in D2.1). The Pilot Organisations tailored the interventions according to their strategic interests and across the five categories of **policy, resource, repository, awareness, and training** as in D2.1 (see Annex II). The interventions were developed for existing structures already providing support to researchers at the Pilot Organisations.

Subsequently, Pilot Organisations conducted a **baseline audit** and set corresponding targets for the indicators and interventions to be tested in each pilot. This last step is key to monitor and support the progress of the pilots in implementing the selected indicators and interventions at the Pilot Organisations. The baselines for the indicators and interventions at M0 and targets for M9 and M18 are expressed in absolute values, percentages, or percentage increases for the cohorts of researchers (see D 3.2 *Baseline Audit of Metrics to test in Pilots*¹¹ and D 2.2 *Baseline Audit of Interventions to test in Pilots*¹² for an overview of the pilots' selection and targets).

Led by WP4, an Action Plan **template** was co-created in order to assist pilots in designing the action plans that would give shape to the interventions supporting the indicators selected. The first version of the template was co-created and ready to be used on month 7 of the project (March 2023). The template underwent two revisions after consultation with the Pilot Organisations in order to accommodate all suggestions. The first integrated version of the action plans was ready in November 2023.

Since then, pilots have been implementing the interventions outlined in D4.1 and noting the necessary improvements and modifications required for optimal implementation. In preparation for this document, a collection of all modifications (and their rationale) per pilot, alongside with various bilateral meetings, were essential to **developing the final action plans** included in section 2 of this document.

Lastly, the following aspects shall be noted regarding the revised action plans:

- **The targets of the indicators are not to be confused with the targets of the interventions.** While the former provide the target to measure progress in attaining different aspects of the RAF pertaining to OS and research assessment, the latter provide targets for the implementation of the interventions, which are in place to support the indicators selected.
- For the last 9 months, Pilot Organisations have progressed and adjusted their action plans. **This report includes the most updated information when compared to previous project deliverables.**
- Due to factors beyond the scope of the OPUS project, major modifications have been made to the actions plans of the **OPUS' RFOs**. In the case of UEFISCDI, a change in the programme call timeline requires one indicator to be implemented after the 18-month OPUS pilot period. In the case of RCL, a delay in the call for project applications has postponed the start of pilot implementation to October 2024 (second stage of implementation). Due to this, a table of changes has not been included for RCL. Both pilots have made the required modifications and adjustments to their action plans to address the challenges encountered during the implementation, ensuring that they stay aligned with project goals. See the relevant action plans in section 2 for greater information.

¹¹ O'Neill, Gareth (2023) Baseline Audit of Metrics to test in Pilots. Deliverable D3.2 of the Open Universal Science (OPUS) project.

¹² Day, Emma (2023) Baseline audit of interventions to Test in the Pilots. Deliverable D2.2 of the Open Universal Science (OPUS) project.

2. Action Plans to implement at Pilots' Institutions

This revised report has been developed in collaboration with the organisations running the pilots in the OPUS project as listed in Table 1.1 above. It compiles the five action plans that result from selection of indicators and interventions included in D2.2 and D3.2.

As previously mentioned, this document includes the most updated information regarding the indicators, the interventions, and their baselines and targets. The five revised action plans included in this report focus on **implementing the interventions that each of the pilots chose, and which support their selections of indicators** (see tables 4.1.1 - 4.1.16 in Annex I for the updated selections of indicators at each of the pilot organisations). Annex II includes the necessary explanations for the modifications included in each of the action plans.

Each organisation was given the flexibility to develop and implement their action plans (APs) according to their needs and particularities.

Additionally, **common interventions** have been designed and included in the following section (as an integral part to all action plans) for the dimensions of OS and gender equality, OS and Trust and OS and industry. The interventions on the Tree of Trust are foreseen in task 4.2 (WP4) and the interventions on gender equality and industry are a continuation to the work carried out in the context of WP1.

Subsequent to the joint interventions on gender equality, trust and industry (2.1), **each pilot section** includes the **following sub-sections**: essential information about the pilot organisations; an overview of policies and practices in place regarding OS and research(er) assessment at each of the organisations - key elements for the OPUS project; the scope of the pilot and details about the cohorts, and the action plans for each of the pilots. This last section firstly includes the necessary clarifications before presenting the revised action plans organised in tables. After the action plans' tables, the pilot organisations have included the rewards that have been discussed with senior management for each of the cohorts.

2.1. Additional interventions for pilots

The following tables include the common interventions -implemented by all pilots- on the dimensions of OS and gender equality, OS and Trust and OS and industry.

Table 2.1: Additional interventions within the Gender equality, Trust and Industry dimensions

| Gender Equality, Trust and Industry | | | | | |
|-------------------------------------|-------------|-----------|------------|--|--|
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Gender Equality and OS Intervention | - | Ongoing | Achieved | <p>This intervention stems from WP1 findings¹³ and aims at fostering dialogue amongst OPUS partners and cohorts concerning the link between gender equality and OS in research assessment.</p> <p>A 2h workshop (first joint intervention) led by VU and attended by all pilot institution representatives and WP4 partners was held during the first stage of implementation on July 5, 2024. In order to inform the workshop, a survey was sent and completed by all pilot institutions with questions touching on their gender equality policies (including gender equality plans), their perceived link between gender equality and OS, and possible interventions they would like to realise on the topic within the OPUS project for the second stage of implementation.</p> <p>The workshop concluded with the common agreement to hold a second workshop as a second joint intervention (including all cohorts) in the second stage of implementation (by March 2025). The aim of this second workshop is to further discuss the links between gender equality and OS in research assessment with all the cohorts.</p> <p>As a follow-up intervention, and assisted by the OPUS gender experts, each pilot institution will meet with their cohorts (a total of 5 meetings) in order to extract the key take-aways and exchange impressions. The meetings will start by a 10 min introduction by the OPUS gender experts to later on open the floor for a guided group discussion. The results will be included in the policy briefs of WP5¹⁴.</p> | <p>WP4 lead and VU (responsible)</p> <p>Pilot representatives and pilot cohorts (main recipients of action)</p> <p>WP4 partners (supporting, including WP5 lead)</p> |

¹³ See Huntingford, Jessica (2022), Gareth O'Neil (2023) Initial State of the Art on Open Science Literature. Deliverable 1.2 of the Open Universal Science (OPUS) project. Link: <https://zenodo.org/records/8410050> (last accessed 22/09/2024).

¹⁴ WP5 – Policy Briefs on Open Science.

| Gender Equality, Trust and Industry | | | | | |
|-------------------------------------|-------------|-----------|------------|---|--|
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Trust and OS intervention | - | Ongoing | Achieved | <p>The work on trust within WP4 has combined the experience of the OPUS partner TrustInside across multiple institutional settings with the results of the review conducted in WP1 on open science trust issues as identified in the literature¹⁵. This was used to develop a specific Trust vs. Open Science conceptual mapping, in order to produce a specific barometer suited to the needs of the pilot institutions in OPUS. The conceptual mapping was sketched in D1.2, and was subsequently extended and refined on the basis of discussion within the consortium. It associates each of the seven components in the Tree of Trust model¹⁶ with characteristic open science issues, connected with the institutional challenges and action potentials that correspond to them. It thus maps how trust can favour – or distrust impede – the acceptance and institutional roll-out of open science principles and practices.</p> <p>The conceptual mapping, finalised in December 2023, provides the basis for barometer development, identifying how responses to statements about particular trust-related issues relate to opinions or reported practices with respect to open science. However, such a mapping is only the basis for barometer development, which requires specific choices of statements – 35 in total – among the infinite array of possible and potentially relevant statements.</p> <p>The first rough cut of a possible barometer respecting the conceptual logic of the mapping was produced in March 2024 and subsequently underwent three rounds of refinement (tests of 90' to 2h) involving WP3 and WP4 leaders, followed by tests with PLOCAN and its researchers (August 2024) and then with all pilot institution representatives as a joint intervention (September 2024). The purpose of this multi-stage testing was to finetune the language of the statements, including intelligibility for non-native English speakers; to check the robustness of underlying conceptual mapping; and to enable pilot institutions to own the codeveloped tool in support of its future roll-out. In parallel, using the same test feedback, TrustInside's technical tools were tested and refined in a number of respects, including the creation of new functionalities for statistical analysis of responses across pilot cohorts, and the webinar implementation protocol was tested and stabilised to ensure time-efficient and standardized delivery in due course across protocols. By September 2024, the barometer and associated protocols have been validated – subject to certain minor and well-identified revisions to be completed by November 2024, providing a solid methodological and technical basis for pilot roll-out in 2025.</p> | <p>WP4 lead, TGB and TrustInside (responsible)</p> <p>Pilot representatives and pilot cohorts (main recipients of action)</p> <p>WP4 partners (supporting)</p> |

¹⁵ See Huntingford, Jessica (2022), Gareth O'Neil (2023) et al. Initial State of the Art on Open Science Literature. Deliverable 1.2 of the Open Universal Science (OPUS) project. Link: <https://zenodo.org/records/8410050> (last accessed 22/09/2024).

¹⁶ TrustInside (2024). Tree of Trust Model. Website link: <https://www.trustinside.fr/en/#tm-top-c> (last accessed 22/09/2024).

| Gender Equality, Trust and Industry | | | | | |
|-------------------------------------|-------------|-----------|------------|--|--|
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <p>In 2025, 5 different sessions on trust and OS with each Pilot Organisation and their cohorts will take place for the second stage of implementation. The timeline for each session will be defined in accordance with each pilot institution.</p> <p>A report summarising the findings will be produced by TrustInside once all sessions have taken place.</p> | |
| Industry and OS intervention | - | - | Achieved | <p>This intervention serves as a continuation to the findings in WP1¹⁷ to increase knowledge and raise awareness amongst researchers regarding the relationship between industry and OS, its opportunities, challenges and best practices.</p> <p>A first joint workshop to be attended by all WP4 partners (including pilot representatives) and led by ABIS will take place in the second stage of the pilot implementation (by November 2024). Among its objectives, the workshop intends to:</p> <ul style="list-style-type: none"> provide a knowledge base for all attendees on the key concepts governing the relationships between OS and industry while defining the most important topics for pilot organisations to understand from industry; exchanging on the collaboration between academia and industry in OS from pilots; sharing and identifying key challenges and differences in the application of Open Science and Open Innovation (OI) between academia and business sectors, discussing possible actions to facilitate OS and OI, and developing targeted questions for industry speakers (for the next joint webinar) to enrich discussions and clarify important insights. <p>Subsequently, a joint webinar will be carried out with all pilot cohorts and invited external industry experts (by March 2025). Expert speakers (number to be confirmed) from diverse industries, such as chemical, telecommunications, IT, food and beverage, energy, pharmaceuticals, and banking, will be invited to share insights on OS and OI. Potential companies include CERN, UMICORE, Orsted, Luminus, Enel, Ferrero, Amadeus, AstraZeneca, etc</p> | <p>WP4 lead and ABIS (responsible)</p> <p>Pilot representatives and pilot cohorts (main recipients of action)</p> <p>WP4 partners (supporting)</p> |

¹⁷ See Huntingford, Jessica (2022), Gareth O'Neil (2023) et al. Initial State of the Art on Open Science Literature. Deliverable 1.2 of the Open Universal Science (OPUS) project. Link: <https://zenodo.org/records/8410050> (last accessed 22/09/2024).

| Gender Equality, Trust and Industry | | | | | |
|-------------------------------------|-------------|-----------|------------|---|-------------------------------|
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <p>Among the topics to be covered, the joint webinar intends to:</p> <ul style="list-style-type: none"> • Explore opportunities and challenges related to implementing OS and OI within various organizations and sectors. • Share best practices and strategies to foster collaboration and drive OS/OI adoption in both academia and industry. • Understand how OS/OI is integrated in the business world, focusing on industry priorities, policies, and incentives related to these frameworks. • Identify gaps and common ground between OS and OI, encouraging information exchange that could lead to improved uptake in both sectors. • Understand how intersectoral collaboration could accelerate the adoption and integration of OS across various industries. | |

The followings sections include the revised action plans for the different institutions in the order foreseen in Table 1.1.

2.2. Information about Pilot# 1 UNL

The NOVA University of Lisbon (UNL), as a public institution of higher education, has as its **mission** to serve society, locally and globally, through knowledge, developing teaching and research of excellence, creating significant social and economic value.

UNL's **vision** is to be a global and civic university in the 21st century:

- Global, because in its strategic areas teaching and research are carried out in genuinely international environments.
- Civic, because all its activity is deeply committed to the development of society, culture, and economy of the region where it is located, of the country and of Europe.

UNL's **strategic objectives** are:

- 1) to undertake a smart specialisation movement that will enable UNL to define its strategic areas.
- 2) to attract and promote the best national and international talent.
- 3) to develop the UNL Community, based on the values of active citizenship and humanism.
- 4) Teaching: to empower students with the knowledge and competencies (soft skills) to successfully build a career anywhere in the world.
- 5) Research: to have specialised and interdisciplinary research agendas aligned with the European Agenda for Knowledge and Innovation and the United Nations 2030 Agenda for Sustainable Development, in addition to its own initiatives.
- 6) Value Creation: to contribute significantly to the social and economic development of the country.
- 7) to promote a new governance model common to all schools, which could be financially sustainable and have greater strategic alignment, and capable of ensuring the provision of a quality public service.

2.2.1. Open Science and Research Assessment at Pilot# 1 UNL

The following sub-sections include different policies and/or practices that exist or are planned within UNL regarding OS and research(er) assessment.

2.2.1 i) Open Science policies, practices and initiatives at Pilot# 1 UNL

UNL is fully committed to OS and in line with the policy of the Portuguese Foundation for Science and Technology (FCT)¹⁸, which is a **European Open Science Cloud** member. Concerning **Open Access (OA) research publications**, UNL implemented its Institutional Repository (RUN)¹⁹ in 2009, including an OA mandate for the deposit of theses and dissertations. In 2012, RUN was selected to be hosted by RCAAP²⁰, the national repository portal. It was the first university in Portugal to implement a Current Research Information System (CRIS)²¹ to manage the research outputs, datasets, activities, press media, projects and prizes of the university. A policy for research information management²² was created in 2019. The CRIS system was integrated with RUN to guarantee the compliance with the Open Access mandates of the funding agencies. The construction of a digital infrastructure for hosting in-house publications in diamond OA is currently underway at school level. It will include a dedicated OA and best practices policy.

When it comes to **research data management (RDM)**, UNL deposits research data in trusted repositories, such as Zenodo, and uses Argos for data management plans. A RDM roadmap is being

¹⁸ https://former.fct.pt/documentos/PoliticaAcessoAberto_Publicacoes.pdf (last accessed 22/11/2023)

¹⁹ <https://run.unl.pt/> (last accessed 22/11/2023)

²⁰ <https://www.rcaap.pt/directory.jsp> (last accessed 22/11/2023)

²¹ <https://novaresearch.unl.pt/> (last accessed 22/11/2023)

²² https://www.unl.pt/sites/default/files/gestao_de_informacao_cientifica_nova_site_v3.pdf (last accessed 22/11/2023)

developed at their Social Sciences and Humanities School. Additionally, an RDM policy is currently under approval in one of their schools due to the nature of the data produced within the field of Life Sciences. In 2019, UNL won a national call of the FCT that allowed the attribution of DOIs to all research outputs and datasets, contributing not only for the **FAIR principles**, but also to assess the impact measured by “alternative metrics” tools. UNL recommends the **software deposit** in GitHub, which is integrated with Zenodo.

Although no dedicated policy for **citizen science** has been developed yet, UNL plans to collect information on all projects conducted at local level in its schools to better support and promote them (see, for instance, Mosquito Web²³ or Memórias de Servidão²⁴).

Concerning **training sessions and upskilling** for OS, UNL has a doctoral school²⁵ including a course on research data management²⁶ and conducts regular advocacy and community capacity building initiatives, such as the development of guides (and guidelines) and promotion of information sessions and trainings at schools and research units²⁷.

Furthermore, in order to **support OS**, the university created an Open Science working group²⁸ in 2020 at their Social Sciences and Humanities School, involving research managers, representatives of the library, services of the school, researchers and members of the Board. It has been promoting open advocacy, information, training and capacity building actions. **Researchers are further involved in OS** through the edition of OS journals (diamond OA) and citizen science projects.

Lastly, UNL is involved in the following **national and European OS projects**:

- Coordination of the national infrastructure ROSSIO²⁹, being the Portuguese node of the Digital Research Infrastructure for the Arts and Humanities (DARIAH).
- National OS digital infrastructure (INDEXAR³⁰).
- National and international networks and working groups aiming to advance the adoption of OS practices in higher education institutions (OPERAS³¹):
 - Portuguese Reproducibility Network³².
 - Portuguese Citizen Science Network³³.
 - Forum GDI³⁴ – Portuguese Research Data Management Forum Working Groups.

2.2.1 ii) Research Assessment policies and practices at Pilot# 1 UNL

UNL has recently approved a new Regulation on researchers’ assessment, published in the Portuguese official journal: Diário da República (Despacho n.º 6757/2023 from June 23). This regulation provides the guidelines for UNL Schools to assess researchers in accordance to their particular circumstances. Therefore, each School has the autonomy to implement and adapt the assessment metrics, following the principles of the Regulation.

The performance appraisal cycle is three-yearly and refers to performance over the previous three calendar years or the minimum of 18 months. The indicator groups for assessment are a) scientific research; b) innovation, impact and knowledge value; c) teaching and training and d) management and administrative tasks. The Schools may apply other assessment tools.

²³ <https://www.ihmt.unl.pt/mosquitoweb/> (last accessed 23/11/2023)

²⁴ <https://projetos.dhlab.fcsh.unl.pt/s/memorias-de-servidao/page/apresentacao> (last accessed 23/11/2023)

²⁵ <https://www.unl.pt/en/study/doctoral-school/nova-doctoral-school> (last accessed 23/11/2023)

²⁶ <https://www.unl.pt/en/courses/study/escola-doutoral/research-data-management-course-14th-edition> (last accessed 23/11/2023)

²⁷ Examples of OS awareness initiatives: <https://www.fcsh.unl.pt/nova-fcsh-celebra-mes-da-ciencia-aberta/> and <https://www.fcsh.unl.pt/investigacao/ciencia-aberta/> (last accessed 22/11/2023)

²⁸ <https://www.fcsh.unl.pt/investigacao/ciencia-aberta/grupo-de-trabalho-ciencia-aberta/> (last accessed 23/11/2023)

²⁹ <https://rossio.pt/front/home> (last accessed 24/11/2023)

³⁰ <https://www.indexar.pt/#/home> (last accessed 24/11/2023)

³¹ <https://operas-eu.org/> (last accessed 24/11/2023)

³² <https://www.ptm.pt/?lang=pt> (last accessed 24/11/2023)

³³ <https://www.cienciadada.pt/> (last accessed 24/11/2023)

³⁴ <https://forumgdi.rcaap.pt/> (last accessed 24/11/2023)

UNL's Research Assessment (RA) Regulation does not include particular aspects directly related with OS. However, it mentions the importance of Schools to consider not only the research outputs, but also the need to reward good scientific practices, including OS.

2.2.2. Scope of the pilot and cohort for the Action Plan at Pilot# 1 UNL

The pilot programme at UNL will involve two distinct research centres. The first centre is the Global Health and Tropical Medicine Research Centre (GHTM), which is part of the Institute of Hygiene and Tropical Medicine. This centre is primarily focused on the development of tools, the enhancement of health systems as well as conducting research, training and systems implementation. The second centre is the Information Management Research Centre (MagIC), integrated at Information Management School. MagIC's core focus lies in examining the interaction between individuals, organisations and information, aiming to leverage information to foster personal growth, enhance organisational performance, and contribute to a better society. The cohort is composed by a group of 15 researchers, consisting of 10 ECR affiliated with GHTM and 4 early-career researchers plus 1 senior researcher affiliated with MagIC. *In the second piloting phase, the cohort will consist of 13 researchers, as two have completed their contracts with GHTM and MagIC and have since moved to other institutions.*

2.2.3. Action Plan to implement the interventions per category at Pilot# 1 UNL

UNL has selected three indicators from the **research category (data management, software development and publications drafting)** and one indicator from the **valorisation category (citizen engagement)**. Due to the nature of the activities of each research centre, three indicators will be measured in each cohort, as described in more detail in Deliverable D3.2 (*Baseline Audit of Metrics to Test in the Pilots*). Please refer to the tables 4.1.1 to 4.1.4 in Annex I for an overview of the full set of indicators and its targets.

The intervention in the **research category (data management)** are contributing to the indicator **"Archived (FAIR) Data Sets Openly Available"** for both cohorts, GMTH and MagIC. By datasets openly available, UNL considers these to be deposited in a trusted repository and made available in OA immediately. UNL has chosen Zenodo, which is a repository federated under EOSC. It is advised the use of the license under CC BY or CC0 (or equivalent) and the information will be provided about all the other scholarly objects, tools and instruments that are needed to re-use or validate the data. With regards to metadata, these need to be licensed under CC0 (or equivalent) and may be in line with FAIR principles. It requires persistent identifiers for data (e.g. DOI), for related publications, authors and, if possible and applicable, for the organisations and grant. Data can be made FAIR, however this is optional and it will not be considered for the assessment.

The **POLEN** project is being developed by the FCCN Unit of the FCT, with the aim to promote the principles and practice of OS, ensuring the sharing and preservation of research data generated under publicly funded projects. The Polen Research Data Repository, deployed under the POLEN project, is already on its pilot implementation phase. Since MagIC and GHMT are participating in this initiative, it makes sense for the OPUS pilot to monitor the archiving of data sets also in this repository. However, it is important to note that the use of this repository by the cohorts is contingent upon its completion at the national level.

The intervention in the **research category (software development)** is contributing to the indicator **"Archived Software Sets Openly Available"** and will be monitored only at MagIC. UNL defines Software Sets Openly Available within the same rationale as the publications to which software sets are associated.

The intervention in the **research category (publications drafting)** is contributing to the indicator **"Published Publications Openly Available"** and will be monitored for both cohorts, GMTH and MagIC. UNL considers Publications Openly Available when published without embargo through trusted repositories (green OA). Within the context of this pilot, the repository selected are UNL's Institutional Repository (RUN), hosted by RCAAP³⁵, the national repository portal. In addition, publication in Open Access venues (gold OA or diamond OA) is also encouraged. Metadata associated to the publications must be licensed under CC0

³⁵ <https://www.rcaap.pt/directory.jsp> (last accessed 24/11/2023)

(or equivalent) and may be in line with FAIR principles. It requires persistent identifiers (e.g., DOI) and if possible and applicable, for the authors, organisations and grants.

The intervention in the **research category (citizen engagement)** is contributing to the indicator **"Citizen Science Activities Involving Open Science Ongoing"** for **"Projects"**; **"Materials"**; **"Engagements"**. This indicator will be monitored only at GHTM. The three subcategories: (i) **"Projects"** can be defined as Citizen Science projects, initiated; (ii) **"Materials"** are considered, for example, brochures handed to visitors, guidelines in digital format, research outputs for wide disseminations and (iii) **"Engagements"** with civil society, which can take the form (as examples and not exclusively) of press conferences, interviews broadcasted over radio, TV or other media, info sessions at schools or other community spaces as well as open days held at the Institute of Hygiene and Tropical Medicine.

The interventions will serve to support the implementation of the indicators. In that sense, some **interventions will be common** to some categories. The Policy intervention and the Resource intervention will be implemented transversally to all the Research indicators. It will also be the case for the Repository intervention – however, specificities related with repositories will differ, according to the nature of the subcategory, as defined above. The interventions on Awareness Raising and Training will follow the same rationale as the previous intervention: the implementation will be transversal to all the Research indicators. Yet, some specificities in the training design and implementation will accommodate the different tools and requirements for repository training. The interventions for the Valorisation category (Citizen Engagement indicator group) will be different, as this field will be more exploratory.

Through the implementation of these interventions, UNL expects to foster a culture that promotes OS, not only in the traditional, expected fields of academic outputs (publications, data, software) which are in different stages of OA incorporation, but also in the field of citizen science, which represents a big opportunity for knowledge sharing, in a bidirectional manner, through the involvement of the community for science outreach.

The following sections include the interventions and respective targets for each of the categories.

2.2.4 Interventions within the Research category for UNL

Table 2.2: *Interventions within Data / Data Management for UNL*

| Data | | | | | |
|---|-------------|-----------|-----------------|---|---|
| Data Management | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1. Policy intervention: Develop UNL's Open Science Policy and procedures to make data sets openly available with clear guidelines and explanation. | - | - | Achieved | <p>This intervention is transversal to the categories of Research/ Data Management, Software development and Publication Drafting.</p> <p>At M0, UNL follows the National Policies from the FCT, which are already aligned with the EU guidelines on this matter. UNL's OS Policy is being drafted and will be submitted for consultation/higher management discussion at M1 (Jan 24). The policy approval, along with management guidelines, was originally anticipated by M9 (September 2024). However, delays in the FCT's policy release prompted UNL to create its own internal open science (OS) guide to support researchers in the meantime. This guide is currently in the final drafting stages and awaiting internal approval. It is expected to be approved by M18 and will be published and distributed to the Schools.</p> <p>Once the FCT's national policies are officially published, UNL will release and disseminate its finalised OS policy to the schools. The schools will then be able to update their internal procedures for dataset publication, following the provided guidelines and explanations.</p> | Vice-Rectors (responsible) UQAE/UGIC Team (supporting, monitoring) |
| 2. Resource Intervention: Ensure there is a member of staff responsible for monitoring, assisting with and understanding any queries that arise for OA and OS | Achieved | - | - | <p>This intervention is transversal to all categories (Research/ Data Management, Software development, Publication Drafting and Valorisation/ Citizen Engagement).</p> <p>Assign staff/working hours at the School level (library) as a central point of reference for OA and OS queries. This has already been done as a starting point for all other activities related to the pilot in this category. This designated role will also be responsible for the training design and implementation. The expected effort in FTE for the role is 0,1 FTE (~4 hours/week).</p> | Cohort MT (responsible) |
| 3. Repository Intervention: Ensure there is a | - | Achieved | Full engagement | UNL defined Zenodo and POLEN as the repositories to record data sets. Zenodo is an open repository developed under the European OpenAIRE. It allows the deposit of data sets and any other research related digital artefacts. For each | Cohort MT (responsible) |

| Data | | | | | |
|---|-------------|-----------|------------|--|---|
| Data Management | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| suitable and easily accessible repository to record data sets. | | | | <p>submission, a persistent digital object identifier (DOI) is provided. It is expected by M18 that the cohorts are fully engaged with Zenodo. Being fully engaged means that the researchers have received the necessary training and are proficient and up-to-date in using the software.</p> <p>The POLEN repository is currently undergoing development, and UNLs' ability to use it is contingent upon its completion at the national level by the FCCN unit of the FCT.</p> | UQAE/UGIC Team (supporting, monitoring) |
| 4. Awareness Intervention: Develop and run sessions to make researchers aware of NOVA's Open Science policy and procedures and the benefits (at individual and institutional level) of recording all data sets (# of sessions). | - | 2 | 3 | <p>This intervention is transversal to the categories of Research/ Data Management, Software development and Publication Drafting.</p> <p>By M9, UNL will organise 2 awareness sessions for both cohorts, designed to:</p> <ol style="list-style-type: none"> Promote Open Science (OS): Topics will include rights retention, Creative Commons licensing, sharing open data, collaborative research platforms, and success stories. Build researchers' capacity on OS policies and procedures: Topics may include open access (OA) policies and practices, data management plans (DMP), research transparency, and reproducibility. <p>By M18, after the approval and publication of UNL's OS Policy, another awareness session will be held to present the newly approved policy on OS.</p> <p>However, the awareness sessions topics and numbers will be tailored to researchers' needs, informed by observations made during the implementation of the Action Plan. Through these awareness sessions participants will gain familiarity with relevant policies, procedures, and the benefits—both individual and institutional—of documenting all datasets.</p> | <p>Cohort MT (responsible)</p> <p>UQAE/UGIC Team (supporting, monitoring)</p> <p>Cohorts GHTM / MagIC (users)</p> |

| | | | | | |
|--|--|---|---|--|---|
| <p>5. Training Intervention: Develop and run a series of workshops to train researchers in where and how to record data sets (# of workshops)</p> | 0 | 2 | 6 | <p>These interventions are transversal to categories Research/ Data Management, Software development and Publication Drafting</p> <p>By M9, UNL will organise 2 training workshops for both cohorts, designed to:</p> <ol style="list-style-type: none">1. Train Research Data Management (RDM) and ARGOS system.2. Publishing in the context of OS <p>Between M10 and M18 UNL will organise four workshops for both cohorts designed to:</p> <ol style="list-style-type: none">1. Train researchers on various instruments, tools, and repositories: These will cover research policy, tools like PURE, and repositories such as Zenodo, RUN, and GitHub, focusing on:<ol style="list-style-type: none">a) Research Data Management (RDM)b) Software sets (targeted at MagIC)c) Publicationsd) Citizen Science (targeted at GHTM)2. Following the mid-term review (M9), additional workshops or webinars will be developed for both cohorts and implemented until M18. The content will be informed by monitoring and evaluation results from M1–M9, gathered through questionnaires and regular monitoring meetings. <p>However, the workshops topics and numbers will be tailored to researchers' needs, informed by observations made during the implementation of the Action Plan. Through these training workshops participants will gain familiarity with relevant policies, procedures, and the benefits—both individual and institutional—of documenting all datasets.</p> | <p>Cohort MT (responsible)</p> <p>UQAE/UGIC Team (supporting, monitoring)</p> <p>Cohorts GHTM / MagIC (users)</p> |
| <p>Goals of the interventions</p> | <p>Making data sets available in OS is not in practice at UNL. Although the University is in line with the National Policy of FCT, this practice is not yet fully institutionalised. This set of interventions will contribute to the practice of making datasets available in OS within the pilots and therefore, within the research community at UNL.</p> | | | | |

| Data | | | | | |
|-----------------------|---|-----------|------------|-----------------------|-------------------------------|
| Data Management | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Risks and mitigations | <p>(*) These risks/mitigations are transversal to categories Research/ Data Management, Software development and Publication Drafting.</p> <ol style="list-style-type: none"> 1. (*) Risk: Delay on the process of internal consultation, approval, and publishing UNL OS Policy within the proposed project time frame, due to the size of the institution (and the potential difficulty to find a common ground in such a short period of time); procedural and administrative requirements associated with the process; unforeseen events that may change priorities. Mitigation: top-down approach, leadership involvement for prioritisation. 2. (*) Risk: Lack of resources to provide training, monitor and support the cohort. Mitigation: Design SMART tasks for project staff. 3. Risk: Resistance to change from GHTM which already uses other repositories; Currently used repositories may be specific of each scientific area Mitigation: verify whether the repositories that the cohort uses as alternatives are able to link to Zenodo; use the awareness sessions to address particular issues; Risk: Journals may recommend different repositories (and in this case the same data set could generate 2 DOIs). Zenodo may not be suitable for depositing genetic sequences. Risk: If the data sets are part of a project with several partners where UNL is not the PI, UNL might not have full control regarding the publishing decision, and publishing data sets can be an issue; In 18 months (pilot duration) the cohorts may not have any datasets completed to publish. For example, experiments gone wrong that need to be redone, or experiments that may need longer than 18M to achieve results. Mitigations: The regular monitoring and questionnaire applied at M9 and M18 will allow the project team to characterise the nature of the data sets, frame the reason for not achieving the target and help design corrective measures. 4 - 5. (*) Risk: Lack of commitment or involvement from the cohorts. Mitigation: involvement of the cohorts in the definition of the targets and respective implementation, so that researchers feel they are part of the process; rewards system; senior management involvement from the very beginning; implement monitoring instruments to raise awareness and deploy training sessions | | | | |

Table 2.3: Interventions within Software / Software Development for UNL

| Software | | | | | |
|--|-------------|-----------|------------|---|---|
| Software Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1. Policy intervention: Develop UNL's Open Science Policy and procedures to make software sets openly available with clear guidelines and explanation. | - | - | Achieved | <p>This intervention is transversal to the categories of Research/ Data Management, Software development and Publication Drafting.</p> <p>At M0, UNL follows the National Policies from the FCT, which are already aligned with the EU guidelines on this matter. UNL's OS Policy is being drafted and will be submitted for consultation/higher management discussion at M1 (Jan 24). The policy approval, along with management guidelines, was originally anticipated by M9 (September 2024). However, delays in the FCT's policy release prompted UNL to create its own internal open science (OS) guide to support researchers in the meantime. This guide is currently in the final drafting stages and awaiting internal approval. It is expected to be approved by M18 and will be published and distributed to the Schools.</p> <p>Once the FCT's national policies are officially published, UNL will release and disseminate its finalised OS policy to the schools. The schools will then be able to update their internal procedures for dataset publication, following the provided guidelines and explanations.</p> | Vice-Rectors (responsible) UQAE/UGIC Team (supporting, monitoring) |
| 2. Resource Intervention: Ensure there is a member of staff responsible for monitoring, assisting with and understanding any queries that arise for OA and OS. | Achieved | - | - | <p>This intervention is transversal to all categories (Research/ Data Management, Software development, Publication Drafting and Valorisation/ Citizen Engagement).</p> <p>Assign staff/working hours at the School level (library) as a central point of reference for OA and OS queries. This has already been done as a starting point for all other activities related to the pilot in this category. This designated role will also be responsible for the training design and implementation. The expected effort in FTE for the role is 0,1 FTE (~4 hours/week).</p> | Cohort MT (responsible) |
| 3. Repository Intervention: Ensure there is a suitable and easily accessible repository to | Achieved | - | - | <p>UNL defined Zenodo and POLEN as the repositories to record data sets. Zenodo is an open repository developed under the European OpenAIRE. It allows the deposit of data sets and any other research related digital artefacts. For each submission, a persistent digital object identifier (DOI) is provided. It is expected by M18 that the cohorts are fully engaged with Zenodo.</p> | Cohort MT (responsible) UQAE/UGIC Team (supporting, monitoring) |

| Software | | | | | |
|---|-------------|-----------|------------|--|---|
| Software Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| record software sets. | | | | The POLEN repository is currently undergoing development, and UNLs' ability to use it is contingent upon its completion at the national level by the FCCN unit of the FCT. | |
| 4. Awareness Intervention: Develop and run sessions to make researchers aware of NOVA's Open Science policy and procedures and the benefits (at individual and institutional level) of recording all data sets (# of sessions). | - | 2 | 3 | <p>These interventions are transversal to categories Research/ Data Management, Software development and Publication Drafting</p> <p>By M9, UNL will organise 2 awareness sessions for both cohorts, designed to:</p> <ol style="list-style-type: none"> Promote Open Science (OS): Topics will include rights retention, Creative Commons licensing, sharing open data, collaborative research platforms, and success stories. Build researchers' capacity on OS policies and procedures: Topics may include open access (OA) policies and practices, data management plans (DMP), research transparency, and reproducibility. <p>By M18, after the approval and publication of UNL's OS Policy, another awareness session will be held to present the newly approved policy on OS.</p> <p>However, the awareness sessions topics and numbers will be tailored to researchers' needs, informed by observations made during the implementation of the Action Plan. Through these awareness sessions participants will gain familiarity with relevant policies, procedures, and the benefits—both individual and institutional—of documenting all software sets.</p> | Cohort MT (responsible) UQAE/UGIC Team (supporting, monitoring) Cohorts GHTM / MagIC (users) |

| Software | | | | | |
|---|-------------|-----------|------------|--|---|
| Software Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 5. Training Intervention: Develop and run a series of workshops to train researchers in where and how to record data sets (# of workshops). | 0 | 2 | 6 | <p>This intervention is transversal to the categories of Research/ Data Management, Software development and Publication Drafting.</p> <p>By M9, UNL will organise 2 training workshops for both cohorts, designed to:</p> <ol style="list-style-type: none"> 3. Train Research Data Management (RDM) and ARGOS system. 4. Publishing in the context of OS <p>Between M10 and M18 UNL will organise four workshops for both cohorts designed to:</p> <ol style="list-style-type: none"> 1. Train researchers on various instruments, tools, and repositories: These will cover research policy, tools like PURE, and repositories such as Zenodo, RUN, and GitHub, focusing on: <ol style="list-style-type: none"> a) Research Data Management (RDM) b) Software sets (targeted at MagIC) c) Publications d) Citizen Science (targeted at GHTM) 2. Following the mid-term review (M9), additional workshops or webinars will be developed for both cohorts and implemented until M18. The content will be informed by monitoring and evaluation results from M1–M9, gathered through questionnaires and regular monitoring meetings. <p>However, the workshop topics and numbers will be tailored to researchers' needs, informed by observations made during the implementation of the Action Plan. Through these training workshops participants will gain familiarity with relevant policies, procedures, and the benefits—both individual and institutional—of documenting all software sets.</p> | <p>Cohort MT (responsible)</p> <p>UQAE/UGIC Team (supporting, monitoring)</p> <p>Cohorts GHTM / MagIC (users)</p> |

| Software | | | | | |
|----------------------------|--|-----------|------------|-----------------------|-------------------------------|
| Software Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Goals of the interventions | Making software sets available in open access is not yet fully in practice or institutionalised at UNL. The goal of these interventions is to provide the first steps to introduce the practice of recording software sets within the research community. Software sets may be a research output applicable to only a part of UNL's research community, due to the nature of the research. In this sense, these interventions – as well as the indicator itself – will be implemented and tested only at MagIC. | | | | |
| Risks and mitigations | <p>These risks/mitigations are transversal to categories Research/ Data Management, Software development and Publication Drafting.</p> <ol style="list-style-type: none"> 1. (*) Risk: Delay on the process of internal consultation, approval, and publishing UNL OS Policy within the proposed project time frame, due to the size of the institution (and the potential difficulty to find a common ground in such a short period of time); procedural and administrative requirements associated with the process; unforeseen events that may change priorities. Mitigation: top-bottom, leadership involvement for prioritisation. 2. (*) Risk: Lack of resources to provide training, monitor and support the cohort. Mitigation: Design SMART tasks for project staff. 3. Risk: If the software sets are part of a project with several partners where UNL is not the PI, UNL might not have full control regarding the publishing decision, and publishing can be an issue; In 18 months (pilot duration) the cohorts may not have any content to publish. For example, experiments gone wrong that need to be replicated, or experiments that may need longer than 18M to achieve results. Mitigations: The regular monitoring and questionnaire applied at M9 and M18 will allow to characterise the nature of the publications, frame the reason for not achieving the target and help design corrective measures. 4 - 5. (*) Risk: Lack of commitment or involvement from the cohorts. Mitigation: involvement of the cohorts in the definition of the targets and respective implementation, so that researchers feel they are part of the process; rewards system; senior management involvement from the very beginning; implement monitoring instruments to raise awareness and deploy training sessions. | | | | |

Table 2.4: Interventions within Publication / Publication Drafting for UNL

| Publication | | | | | |
|--|-------------|-----------|------------|---|---|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1. Policy intervention: Develop UNL's Open Science Policy and procedures to make publication openly available with clear guidelines and explanation. | - | - | Achieved | <p>This intervention is transversal to categories Research/ Data Management, Software development and Publication Drafting</p> <p>At M0, UNL follows the National Policies from the FCT, which are already aligned with the EU guidelines on this matter. UNL's OS Policy is being drafted and will be submitted for consultation/higher management discussion at M1 (Jan 24). The policy approval, along with management guidelines, was originally anticipated by M9 (September 2024). However, delays in the FCT's policy release prompted UNL to create its own internal open science (OS) guide to support researchers in the meantime. This guide is currently in the final drafting stages and awaiting internal approval. It is expected to be approved by M18 and will be published and distributed to the Schools.</p> <p>Once the FCT's national policies are officially published, UNL will release and disseminate its finalised OS policy to the schools. The schools will then be able to update their internal procedures for dataset publication, following the provided guidelines and explanations.</p> | Vice-Rectors (responsible) UQAE/UGIC Team (supporting, monitoring) |
| 2. Resource Intervention: Ensure there is a member of staff responsible for monitoring, assisting with and understanding any queries that arise for OA and OS. | Achieved | - | - | <p>This intervention is transversal to all the categories (Research/ Data Management, Software development, Publication Drafting and Valorisation/ Citizen Engagement)</p> <p>Assign staff/working hours at the School level (library) as a central point of reference for OA and OS queries. This has already been done as a starting point for all other activities related to the pilot in this category. This designated role will also be responsible for the training design and implementation. The expected effort in FTE for the role is 0,1 FTE (~4 hours/week).</p> | Cohort MT (responsible) |
| 3. Repository Intervention: Mandate deposit on local/national open repository to record open and | Achieved | - | - | <p>UNL defined Zenodo and POLEN as the repositories to record data sets. Zenodo is an open repository developed under the European OpenAIRE. It allows the deposit of data sets and any other research related digital artefacts. For each submission, a persistent digital object identifier (DOI) is provided. It is expected by M18 that the cohorts are fully engaged with Zenodo. Being fully engaged means</p> | Cohort MT (responsible) UQAE/UGIC Team (supporting, monitoring) |

| Publication | | | | | |
|---|-------------|-----------|------------|--|---|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| embargoed publications (RUN). | | | | <p>that the researchers have received the necessary training and are proficient and up-to-date in using the software.</p> <p>The POLEN repository is currently undergoing development, and UNLs' ability to use it is contingent upon its completion at the national level by the FCCN unit of the FCT.</p> | |
| 4. Awareness Intervention: Develop and run sessions to make researchers aware of NOVA's Open Science policy and procedures and the benefits (at individual and institutional level) of recording all data sets (# of sessions). | - | 2 | 3 | <p>This intervention is transversal to the categories of Research/ Data Management, Software development and Publication Drafting.</p> <p>By M9, UNL will organise 2 awareness sessions for both cohorts, designed to:</p> <ol style="list-style-type: none"> Promote Open Science (OS): Topics will include rights retention, Creative Commons licensing, sharing open data, collaborative research platforms, and success stories. Build researchers' capacity on OS policies and procedures: Topics may include open access (OA) policies and practices, data management plans (DMP), research transparency, and reproducibility. <p>By M18, after the approval and publication of UNL's OS Policy, another awareness session will be held to present the newly approved policy on OS.</p> <p>However, the awareness sessions topics and numbers will be tailored to researchers' needs, informed by observations made during the implementation of the Action Plan. Through these awareness sessions participants will gain familiarity with relevant policies, procedures, and the benefits—both individual and institutional—of documenting all publications.</p> | <p>Cohort MT (responsible)</p> <p>UQAE/UGIC Team (supporting, monitoring)</p> <p>Cohorts GHTM / MagIC (users)</p> |

| Publication | | | | | |
|---|-------------|-----------|------------|---|--|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 5. Training Intervention: Develop and run a series of workshops to train researchers in where and how to record data sets (# of workshops). | 0 | 2 | 6 | <p>This intervention is transversal to the categories of Research/ Data Management, Software development and Publication Drafting.</p> <p>By M9, UNL will organise 2 training workshops for both cohorts, designed to:</p> <ol style="list-style-type: none"> 5. Train Research Data Management (RDM) and ARGOS system. 6. Publishing in the context of OS <p>Between M10 and M18 UNL will organise four workshops for both cohorts designed to:</p> <ol style="list-style-type: none"> 1. Train researchers on various instruments, tools, and repositories: These will cover research policy, tools like PURE, and repositories such as Zenodo, RUN, and GitHub, focusing on: <ol style="list-style-type: none"> a) Research Data Management (RDM) b) Software sets (targeted at MagIC) c) Publications d) Citizen Science (targeted at GHTM) 2. Following the mid-term review (M9), additional workshops or webinars will be developed for both cohorts and implemented until M18. The content will be informed by monitoring and evaluation results from M1–M9, gathered through questionnaires and regular monitoring meetings. <p>However, the workshop topics and numbers will be tailored to researchers' needs, informed by observations made during the implementation of the Action Plan. Through these training workshops participants will gain familiarity with relevant policies, procedures, and the benefits—both individual and institutional—of documenting all publications.</p> | Cohort MT (responsible) UQAE/UGIC Team (supporting, monitoring) Cohorts GHTM / MagIC (users) |

| Publication | | | | | |
|----------------------------|---|-----------|------------|-----------------------|-------------------------------|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Goals of the interventions | The practice of publishing in OA is in the process of becoming fully institutionalised at UNL. Currently, 66% of UNL publications are in OA. With the implementation of UNL's OS policy, we would like to test if there will be an increase of OA publications within the institution. | | | | |
| Risks and mitigations | <p>These risks/mitigations are transversal to categories Research/ Data Management, Software development and Publication Drafting.</p> <ol style="list-style-type: none"> 1. (*) Risk: Delay on the process of internal consultation, approval, and publishing UNL OS Policy within the proposed project time frame, due to the size of the institution (and the potential difficulty to find a common ground in such a short period of time); procedural and administrative requirements associated with the process; unforeseen events that may change priorities. Mitigation: top-bottom, leadership involvement for prioritisation. 2. (*) Risk: Lack of resources to provide training, monitor and support the cohort. Mitigation: Design SMART tasks for project staff. 3. Risk: If the publications are part of a project with several partners where UNL is not the PI, UNL might not have full control regarding the publishing decision, and publishing data sets can be an issue; In 18 months (pilot duration) the cohorts may not have any content to publish. For example, experiments gone wrong that need to be replicated, or experiments that may need longer than 18M to achieve results. Mitigations: The regular monitoring and questionnaire applied at M9 and M18 will be able to characterise the nature of the publications, frame the reason for not achieving the target and help design corrective measures. 4 - 5. (*) Risk: Lack of commitment or involvement from the cohorts. Mitigation: involvement of the cohorts in the definition of the targets and respective implementation, so that researchers feel they are part of the process; rewards system; senior management involvement from the very beginning; implement monitoring instruments to raise awareness and deploy training sessions. | | | | |

2.2.5. Interventions within the Valorisation category

Table 2.5: *Interventions within Engagement / Citizen Engagement for UNL*

| Engagement | | | | | |
|--|-------------|-----------|------------|--|--|
| Citizen Engagement | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1. Policy intervention: Seek senior management approval to foster and collect the number of citizen science activities and develop guidelines and procedures on how to collect data on citizen science activities. | - | - | Achieved | The OPUS team at UNL will propose a draft update of UNL's OS policy to include the task of collecting citizen science activities ongoing, as well as develop guidelines and procedures to collect data on citizen science activities. This proposal will consider the results from an internal assessment in order to find which repository/repositories are adequate to implement at UNL's context. | UQAE/UGIC Team (responsible) Cohort MT (supporting) Vice-Rectors (decision making) |
| 2. Resource Intervention: Ensure there is a member of staff responsible for monitoring, assisting with and understanding any queries that arise for OA and OS. | Achieved | - | - | This intervention is transversal to categories all categories: Research/ Data Management, Software development, Publication Drafting and Valorisation/Citizen Engagement Assign staff/working hours at the School level (library) as a central point of reference for OA and OS queries. This has already been done as a starting point for all other activities related to the pilot in this category. This designated role will also be responsible for the training design and implementation. The expected effort in FTE for the role is 0,1 FTE (~4 hours/week). | Cohort MT (responsible) |
| 3. Repository Intervention: Ensure there is an appropriated database to store the number of | - | - | Achieved | UNL will assess which repository will be used to collect the number of citizen science activities ongoing. A self-assessment questionnaire will be applied to the cohort (GHTM only) in order to identify database requirements to collect citizen science activities ongoing. | Cohort MT (responsible) UQAE/UGIC Team (supporting, monitoring) Vice-Rectors |

| Engagement | | | | | |
|---|-------------|-----------|------------|--|---|
| Citizen Engagement | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| citizen science activities ongoing. | | | | <p>Senior Management will decide if UNL should develop an internal database or use an already developed instrument (either internal, e.g., CRIS System/PURE for output monitoring or external to the institution).</p> <p>It should be possible to create mechanisms for easy use of this tool and to monitor and support the cohort's user experience.</p> | (decision making) |
| 4. Awareness Intervention: Develop and run a series of information sessions to make researchers aware of UNL's Open Science policy and practices that support citizen science activities (# of sessions). | | 1 | 2 | <p>UNL will develop at M1 one information session for both cohorts, which will be designed to:</p> <p>Provide capacity building as well as understanding of the benefits (at individual and institutional levels) of OS practices. Topics may include: what is a citizen science project; principles, legal and ethical issues; IP citizen data; the importance/impact of citizen science projects developed within the scope of other funded projects; a case study presentation, etc.</p> <p>Considering the approval and publication of UNL OS Policy, another awareness session will take place providing a presentation of the approved policy on OS.</p> | <p>Cohort MT (responsible)</p> <p>UQAE/UGIC Team (supporting, monitoring)</p> <p>Cohorts GHTM (users)</p> |
| 5. Training Intervention: Develop a series of workshops to train researchers in what a citizen science project is, and where and how to record the number of citizen science activities (# of workshops). | 0 | 0 | 2 | <p>By M18 UNL will develop two workshops for the cohort, which will be designed to:</p> <p>(i) In parallel with the repository intervention, training will be provided to ensure that pilot researchers know how to record all intersectoral citizen science activities ongoing. All the projects will have dedicated sites with digital material. The way to ensure that this information is preserved will be to use arquivo.pt (preservation of web pages). This may be one of the tools to be addressed in the training. Other repositories will also be addressed in accordance with the outcomes under Repository interventions.</p> <p>(i) Following the mid-term review (M9), additional workshops or webinars will be developed for each cohort and implemented by M18. The contents will be set considering the monitoring and evaluation results of M1-9 through the questionnaires and regular monitoring meetings.</p> | <p>Cohort MT (responsible)</p> <p>UQAE/UGIC Team (supporting, monitoring)</p> <p>Cohorts GHTM (users)</p> |

| Engagement | | | | | |
|----------------------------|---|-----------|------------|-----------------------|-------------------------------|
| Citizen Engagement | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Goals of the interventions | As no dedicated policy for citizen science is developed, UNL sees an opportunity to improve OS policy in this field. In addition, UNL aspires to create a strategy to promote OS within citizen engagement projects, involving the different communities. | | | | |
| Risks and mitigations | <p>These risks/mitigations are transversal to categories: Research/ Data Management, Software development, Publication Drafting and Valorisation/Citizen Engagement.</p> <ol style="list-style-type: none"> (*) Risk: Delay on the process of internal consultation, approval, and publishing UNL OS Policy within the proposed project time frame, due to the size of the institution (and the potential difficulty to find a common ground in such a short period of time); procedural and administrative requirements associated with the process; unforeseen events that may change priorities. Mitigation: top-bottom, leadership involvement for prioritisation. (*) Risk: Lack of resources to provide training, monitor and support the cohort. Mitigation: Design SMART tasks for project staff. (*) Risk: lack of commitment or involvement from the cohorts. Mitigation: involvement of the cohorts in the definition of the targets and respective implementation, so that researchers feel they are part of the process; rewards system; senior management involvement from the very beginning; implement monitoring instruments to awareness and training sessions. | | | | |

In recognition of researchers' contributions to Open Science practices, UNL has established a two-reward system:

1. **Grant/Proposal Writing Training:** Specialized sessions will be offered to enhance researchers' skills in developing successful grant and proposal applications, equipping them with the tools needed to secure funding for their research.
2. **Consider OS as a Career Progression Indicator:** UNL recognises the importance of integrating Open Science (OS) practices into the career progression of their researchers. As part of our commitment to fostering a culture of openness, the following OS practices will be considered as formal criteria, such as **Archived (FAIR) Data Sets Openly Available, Archived Software Sets Openly Available, Published Publications Openly Available** and **Citizen Science Activities involving Open Science**.

These contributions will be considered in the following areas of career progression:

- a) **Permanent Research Positions:** The evaluation of OS contributions will play a role in the hiring process for permanent research positions, subject to the successful completion of the trial period.
- b) **Renewal of Fixed-Term Contracts:** Specially contracted researchers will see OS practices evaluated as part of the decision-making process when considering contract renewals.
- c) **Salary Advancement:** Researchers' remuneration levels within their category may be positively influenced by their consistent contributions to OS practices.

While this reward system is intended to be applied across all researchers at NOVA, we will use the piloting of this project to fine-tune and better design the specific metrics and evaluation methods. The feedback and data collected during the piloting phase will help shape a more robust and comprehensive framework for the incorporation of OS practices into career progression. **However, it is important to note that the full implementation of this reward system will extend beyond the OPUS project time**

2.3. Information about Pilot# 2 UCY

The University of Cyprus (UCY), as a higher education institution has a **mission** to establish itself as a Pioneer Research Institution achieving International Scientific Recognition in European Higher Education, offering Competitive Programmes and becoming a Centre of Excellence in the wider Euro – Mediterranean Region. It will do so through the promotion of scholarship and education, teaching and research, and the enhancement of the cultural, social and economic development of Cyprus. UCY's **vision** is both to become a leader among young European Universities and a pioneer in OS.

UCY's **strategic objectives** are included in the in the following areas: (1) Internationalisation; (2) Ensuring functional and operational sustainability; (3) Recruitment of high-calibre academic staff; (4) Attracting students of high academic level; (5) Developing hybrid and/or distant/remote forms of education, and (6) Accelerating Infrastructure development.

These areas are strongly related to developing synergies in teaching and research with partners across the globe, the optimal utilisation of copyrights and patents, using technology to promote hybrid and distance teaching, the development and sustainability of the university via attracting high-calibre researchers, students and staff both from Cyprus and abroad, and accelerating infrastructure development.

2.3.1 Open Science and Research Assessment at Pilot# 2 UCY.

The following sub-sections include different policies and/or practices that exist or are planned within the institution regarding OS and research assessment.

2.3.1 i) Open Science policies, practices and initiatives at Pilot# 2 UCY

UCY adopted its institutional OS Policy³⁶ in 2022, in accordance with the National Policy for Open Access to Scientific Information (in Greek)³⁷. The Policy encourages **OA publications** as well as open preprints and metadata, via the institutional depository GNOSIS³⁸. It acknowledges the need for gradual adjustment to a regime of open data and coding to the possible degree, anticipating the need to invest in resources to make this possible and connecting to the **EOSC**. All researchers have been requested to generate ORCID accounts with public access guided by the help of the University Library³⁹.

UCY's OS policy stipulates as a key objective the collection of quantitative evidence regarding the fraction of research works with Green or Golden Access. The policy also encourages UCY researchers to adopt best practices and **FAIR principles** in **data management**, embodied in a **RDMP** that is recommended for every project, including a data viability plan and contact information of responsible researchers.

Although there are no specific uniform practices on OA **research software**, it falls within the overall encouragement of OS practices at the university, which will be adopted within the Professional Career Development Plan (PCDP), triggered by the participation on the OPUS project."

Although no dedicated policy for citizen science has been developed yet, there are other activities within the university that could lead to the collection of initiatives related with citizen science projects.

Furthermore, frequent webinars and/or physical events on different aspects of OS are organised for **OS upskilling and training sessions**. The RISS (Research and Innovation Support Service) has engaged researchers from different fields to deliver seminars. For example:

³⁶ <https://library.ucy.ac.cy/wp-content/uploads/2022/10/Institutional-Policy-Open-Science-2.pdf> (last accessed 24/11/2023)

³⁷ <https://opensciencecy.ucy.ac.cy/wp-content/uploads/2023/02/%CE%95%CE%B8%CE%BD%CE%B9%CE%BA%CE%AE-%CE%A0%CE%BF%CE%BB%CE%B9%CF%84%CE%B9%CE%BA%CE%AE-%CE%91%CE%BD%CE%BF%CE%B9%CE%BA%CF%84%CE%AE%CF%82-%CE%A0%CF%81%CF%8C%CF%83%CE%B2%CE%B1%CF%83%CE%B7%CF%82.pdf> (last accessed 24/11/2023)

³⁸ <https://gnosis.library.ucy.ac.cy/> (last accessed 24/11/2023)

³⁹ <https://library.ucy.ac.cy/wp-content/uploads/2022/07/guide-ORCID.pdf> (last accessed 24/11/2023)

- An OS training for Early Career Researchers (ECRs) has been designed and delivered by the Library with the aim to deliver it on an annual basis. In addition, RISS has created an Open Innovation and Entrepreneurship training for ECRs.
- Best practices sharing from Computer Scientists on software and code with the research community.
- Best practices sharing from Scientists from Social/Biomedical Sciences about preregistration, transparency and reproducible data analysis.
- Law Scientists have also shared and discussed issues concerning intellectual property rights and how they relate to OS with the wider UCY community.

Researchers at UCY are involved in the development of all research policies; these are examined by the Research Committee represented by all faculties and approved by the Senate, where the participation of researchers reaches 90% of the decision-making body members.

UCY is partner to a series of **partnerships and networks** that advance OS principles in Europe. The Related projects for UCY are as follows:

- ERA Chair in Science and Innovation Policy and Studies (SInnoPSis)
- SECURE
- YUFE2030
- The Horizon 2020 YUFFERING⁴⁰ project.
- The Horizon 2020 DIOSI⁴¹ project.
- [OpenAIRE](#)⁴²
- [OPERAS](#)⁴³

These partnerships are gradually playing an important role in informing OS research practices at UCY. Within the YUFFERING project, an OS Calendar⁴⁴ for 2022 has been formed, and it is envisioned that a Research Assessment Policy will be formulated and will be entirely based on the principles of CoARA, where OS will be one of its key pillars. While as a member of Young European Research University Network (YERUN), UCY promotes young universities as pioneers of OS in Europe, (as can be seen in all the related activities⁴⁵ and YERUN Open Science Awards⁴⁶).

2.3.1 ii) Research Assessment policies and practices at Pilot # 2 UCY

A **Professional Career Development Plan** (PCDP) is in force at UCY, which comprises a summary of past achievements and a review of expectations regarding the work developed at KIOS CoE. It includes a performance evaluation based on the goals and objectives that have been set in the previous year, assessment of work behaviour (soft skills), a review of career and personal development, and a section where the researchers set their goals and objectives for the next year upon discussion with their supervisor(s).

The purpose of the PCDP is to keep researchers on track with the goals and objectives that have been set and help them and their supervisor(s) identify training needs and/or possible room for improvement regarding technical and non-technical skills. Furthermore, the PCDP provides the appropriate feedback and guidance needed to assist the researchers in reaching their goals. It is an opportunity for them to reflect on their work, performance, role within KIOS CoE, and their future.

Both the researchers and the supervisor(s) should come to the yearly PCDP meeting with notes and ideas covering all aspects of the supervisee's contributions to be further incorporated in the PCDP document. Where possible, comments are encouraged to be included in order to provide feedback on the researcher's experience for each reported activity: how helpful it has been (or not), and any obstacles faced. Upon discussion between the supervisee and the supervisor(s), all relevant PCDP Parts should be carefully completed following the instructions in each section.

⁴⁰ <https://yufe.eu/yufering/> (last accessed 24/11/2023).

⁴¹ <https://diosi.eu/> (last accessed 24/11/2023).

⁴² <https://www.openaire.eu/> (last accessed 27/11/2023).

⁴³ <https://www.operas-project.eu/> (last accessed 27/11/2023).

⁴⁴ <https://svkri.uniri.hr/yufering-open-science-calendar-2022/> (last accessed 24/11/2023).

⁴⁵ <https://yerun.eu/our-work/> (last accessed 24/11/2023).

⁴⁶ <https://uniri.hr/en/vijesti/yerun-open-science-awards-2022-call-now-open/> (last accessed 24/11/2023).

The PCDP is in process of being updated in order to include OS assessment criteria in the relevant sections, initiative that has been prompted by the participation in the OPUS project. The plan is to scale-up the PCDP at UCY level.

2.3.2. Scope of the pilot and cohort for the Action Plan at Pilot# 2 UCY

The UCY pilot programme will be integrated into the KIOS Research and Innovation Centre of Excellence (KIOS CoE), specialised in cutting-edge multidisciplinary research and innovation within the field of information and communication technologies. The primary focus of this Research Unit is monitoring, controlling, securing and managing critical infrastructure systems. The pilot programme will include 12 ECRs affiliated at the Centre and will last for 18 months, starting in January 2024. Depending on the pilot's outcomes and its impact on UCY OS objectives, it may be extended beyond the project scope.

The assessment process within the pilot will occur concurrently with the regular formal researchers' evaluation. Rather than assessing individual researchers, the focus will be on collective evaluation, as a cohort, for the purpose of the pilot and to contribute to the future policies and priorities, concerning researcher assessment at the Institution. The baseline and target values for the pilot were set based on existing data on researchers' activities as well as the anticipation of future activities of the research within the pilot cohort.

2.3.3. Action Plan to implement the interventions per category at Pilot# 2 UCY

The pilot is structured around the overarching category of **research** and is strategically divided into three key subcategories: **publications**, **data** and **software**. The pilot will be monitored using three indicator groups: **publication drafting**, **data management**, and **software development**. These indicators will help to measure the adoption and impact of OS practices in each subcategory, guiding us in tracking progress and identifying areas for improvement. Please refer tables to 4.1.5 to 4.1.7 in Annex I for an overview of the full set of indicators and its targets.

The indicator group chosen within **publications** was "**publications drafting**". UCY's pilot will emphasize the importance of OA publishing, preprints, and collaborative writing. By encouraging researchers to openly share their findings UCY aims to enhance the visibility and impact of their work while promoting the exchange of knowledge within the academic community and beyond. Publications may include preprints and will comprise both 'green' and 'gold' OA. Deposition to the KIOS CoE Open Knowledge Portal⁴⁰ on Zenodo is mandatory. Currently, 'Gold' open access publications (very few at the moment) are available only at the publishers' websites, but as a good practice these are also uploaded to the KIOS CoE Open Knowledge Portal. With regards to "accepted manuscripts" UCY considers the peer-reviewed version after addressing the reviewers' comments, while the version of record is the publisher's version after their typesetting, formatting, etc. In this case, accepted manuscripts are mandatory to upload to the KIOS CoE Open Knowledge Portal after the publication is finalized (i.e., DOI is available). In particular, the Author Accepted Manuscript (in case of Green open access) or version of record (in case of Gold open access) of all journal/conference publications must be made available online on the KIOS CoE Open Knowledge Portal on Zenodo as soon as possible (after being assigned a DOI by the publisher), with no embargo period and under the CC BY license. The approval of this policy is taking place within the context of the OPUS pilot. Typically, a small budget is provisioned in the R&D projects that fund the research activities leading to the publications and can be applied to APCs. No maximum amount allowed is formally written in the UCY's policy.

With regards to copyright, transferring the copyright of the article to the publisher is the norm in the vast majority of UCY's publications. The 'KIOS OS Policy' includes guidelines for choosing a suitable license and typically cc-by or EUPL is recommended. In many cases the OA license (e.g., cc-by-nc/nd) is determined by the publisher and the author is instructed to abide by this. In general, authors are advised to contact the KIOS Open Science Committee in case they need further consultation.

The indicator group associated to the subcategory **data** is "**Data management**", and it is dedicated to promote sound data management practices. Researchers will be encouraged to document, share, and archive their data openly, facilitating reproducibility and reusability. This subcategory is critical for

promoting data-driven research and ensuring the long-term preservation of valuable research data. "Data management" follows the same OA principles as publications (above), although 'gold' OA does not typically apply for data sets in KIOS publications.

The indicator group associated to the subcategory **software** is "**software development**" and will emphasize the significance of open-source software development, code sharing, and collaboration. Open software not only accelerates the progress of science but also enhances the reliability and transparency of computational research.

The interventions will serve to support the implementation of the indicators within the research category and are included in the following section.

⁴⁰ KIOS CoE Open Knowledge Portal. Link: <https://zenodo.org/communities/kios-coe?q=&l=list&p=1&s=10&sort=newest> (last accessed 27/11/2023)

2.3.4. Interventions within the Research category

Table 2.6: Interventions within Publications, Data, Software, Reproducible Research / Publication Drafting, Data Management, Software Development for UCY

| Publications, Data, Software | | | | | |
|--|-------------|-----------|------------|---|---|
| Publication Drafting, Data Management, Software Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1. Policy intervention: Seek (KIOS) management approval: decision to implement the OPUS pilot and to adjust OS policies and procedures (i.e., make data/software sets/publications openly available where applicable). | - | Achieved | - | <p>Although KIOS is one of UCY's entities that already has advanced knowledge/involvement in OS principles, the pilot offers new opportunities to enhance its current position. This will happen through the introduction of new tasks/actions/interventions of which require prior management approval in the form of policy amendments. Therefore, this intervention is considered as an overarching priority which will define the deployment of the subsequent OPUS interventions. The following six tasks have been identified towards facilitating the implementation of the Policy intervention, to be developed between M1 and M9:</p> <ol style="list-style-type: none"> 1. Pilot "Kick-off" meeting with KIOS OS Committee – Official Approval of Pilot/Action Plan at M1; 2. Definition of roles and responsibilities within KIOS regarding the interventions' implementation on: <ol style="list-style-type: none"> a) Coordination/support of participating ECRs b) Monitoring of indicators c) Liaising with the OPUS project manager (Research and Innovation Support Service) 3. Identify and commit 12 ERCs to participate in the cohort and in any additional organic positions required (see Resource intervention). 4. Identify amendments required to existing internal KIOS policy and/or procedures originating from the OPUS pilot implementation: <ol style="list-style-type: none"> a) PCDP scheme b) OS Award c) Any other aspects of the policy deemed necessary. 5. Hold meeting with UCY leadership team (Vice-Rector) to inform on the details of the OPUS pilot to be implemented. | <ul style="list-style-type: none"> - Head of OS Committee (Responsible) - ERA Chair, - Research and Innovation Support Service, Research Manager and - Library, National Open Access Desk (supporting) KIOS Exec Committee - Vice-Rector (involved: providing ad hoc support) |
| 2. Resource Intervention: Ensure there is a | | | | As mentioned above KIOS has an advanced involvement in OS. As such an OS Committee is already set-up and running with policy/strategy and oversight role and responsibilities. The three suggested actions below are targeted towards | <ul style="list-style-type: none"> -Head of OS Committee (Responsible/monitoring) |

| Publications, Data, Software | | | | | |
|--|-------------|----------------------------|---------------------|--|--|
| Publication Drafting, Data Management, Software Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| member (or members) of staff responsible for monitoring, assisting with and understanding any ethical and operational queries for collecting data linked to the indicators | - | Achieved (actions 2 and 3) | Achieved (action 1) | <p>introducing the OS role applicable and relevant across all research operating levels in KIOS (including the 12 ECRs who will be KIOS' specific cohort for the OPUS pilot).</p> <ol style="list-style-type: none"> 1. Prepare an "OPUS/OS Champion" "Role & Responsibilities", position document by M10; 2. Introduce 2 members of the KIOS OS Committee holding the "OPUS/OS Champion" role, for promoting OS, addressing any queries, assisting newcomers, providing overall support on OS matters, among other OS related tasks that may arise. 3. Identify adequate resources (e.g. manuals, handbooks, presentations, subscriptions, etc.), including estimation effort in FTE for the role, and ensure they will be available to facilitate and support the implementation of the "OPUS/OS Champion" role/position. <p>UCY does not predict a full-time position for this role, and FTE in the early stages of the pilot will be 0.1 (2-3 hours/week)</p> | <p>- ERA Chair, - RISS (Research and Innovation Support Service, Research Manager) and - Library, National Open Access Desk (supporting)</p> |
| 3. Repository Intervention: Ensure there is a suitable and easily accessible database or repository to record and monitor relevant metrics | - | Achieved (2) | Achieved (1) | <p>The competent entity of UCY Library (the National Open Access Desk) and its cooperation with KIOS will have an instrumental role in the implementation of this Intervention.</p> <ol style="list-style-type: none"> 1. Establish a channel of communication/cooperation between KIOS and the curators of UCY's repository (GNOSIS) by M10. 2. Design a hands-on training on the use of the available repositories: <ol style="list-style-type: none"> 1. Zenodo (KIOS CoE Open Knowledge Portal), 2. GitHub (KIOS CoE Repositories), and 3. GNOSIS Institutional Repository). <p>Codesigned by KIOS and Library Curator. (see intervention 5 for more detail on its implementation).</p> | <p>-Head of OS Committee (for repositories ZENODO, GitHub and Code Ocean) and - Library -National Open Access Desk- (for GNOSIS) (responsible) -Research and Innovation Support Service (Research Manager) (supporting) -OPUS/OS Champions (involved: providing ad hoc support)</p> |
| 4. Awareness Intervention: Content creation and participating | | | | <p>The planned actions include:</p> <ol style="list-style-type: none"> 1. Three official communications are envisioned, including: | <p>Head of OS Committee (responsible) - ERA Chair and</p> |

| Publications, Data, Software | | | | | |
|---|----------------------|-----------|--|--|--|
| Publication Drafting, Data Management, Software Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| in events to raise awareness and promote open science principles within the organisation and the broader community. | Achieved (action 1a) | - | Achieved (rest of actions: 1b, 1c, 2, 3 & 4) | <ul style="list-style-type: none"> (a) at the kick-off stage, to introduce the project through an article on Newsletter. (b) at M13, Podcast on the Pilot to communicate achievements, and (c) at M18, communication from UCY leadership on the conclusion of the Pilot, its outcomes and the next steps forward. <ol style="list-style-type: none"> 2. Presentation on the OPUS pilot during the OS week (18 October 2024). The presentation will aim to raise awareness on the Pilot and on how to implement OS principles in the everyday research work. The session will identify the benefits and values that OS brings to researchers (as it enhances the quality of research) but also to research careers through its link to research assessment. 3. Participation of KIOS ECRs in the "Open Data Day" event. Participation will include planned presentations on how OS creates value (specifically for the IT domain) by reporting relevant metrics, making them openly available, presenting specific outcomes from the OPUS pilot as best practices and making KIOS available to transfer knowledge gained from its participation. 4. Dissemination and encouragement to participate in other relevant OS events. | - RISS (Research and innovation Support Service, Research Manager (support)) |
| 5. Training Intervention: Train researchers on topics related to making openly available data/software sets/publications, and other OS related topics (#actions). | 1 | 2 | 5 | <p>At this stage, training will solely address KIOS researchers, and attendance will be tracked. However, the design of the trainings will foresee wider application in the academic community. The following actions are foreseen:</p> <ol style="list-style-type: none"> 1. Aligned with the outcomes of the Pilot "Kick-off" meeting (see Policy Intervention), UCY will deliver one introductory seminar before the pilot start on OPUS and OS context/aspects, including information on policy updates as result of the OPUS pilot (joint presentation by ERA Chair and KIOS). This session will occur during one full day and will be open to all KIOS staff, plus support from the IES leadership team for advocating OS as assessment criteria. 2. A second introductory seminar is also foreseen by M3 exclusively for the | -ERA Chair (responsible/monitoring) -Head of OS committee/committee -Library, National Open Access Desk) -Research and innovation Support Service, Research Manager (support) |

| Publications, Data, Software | | | | | |
|---|-------------|-----------|------------|---|-------------------------------|
| Publication Drafting, Data Management, Software Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <p>cohort of researchers (12 ECRs).</p> <ol style="list-style-type: none"> By M16 a training will be delivered by the Library and KIOS (joint presentation) on the use of OS tools and repositories. Another training session will be delivered by KIOS at M11 to train the trainer for "OPUS/OS Champion (OSC)" role operating within KIOS. An OS Champion will be a preferably junior level serving as a dynamic advocate for OS principles, fostering a culture of transparency, collaboration, and knowledge sharing within their academic community. This role involves actively supporting peers by imparting knowledge on OS practices, promoting data sharing, and advocating for reproducibility. Champions contribute to workshops, mentorship programs, and awareness campaigns to instill a commitment to openness. As ambassadors of OS values, they inspire their peers to embrace transparent research methods, open access publishing, and ethical data management. By actively engaging with their community, OS Champions play a pivotal role in shaping a future generation of researchers dedicated to advancing science through openness and collaboration. The training will have the form of a real-case simulation where the participating OS Champions will be called to advocate for Open Science. The OSC will take on the role of a young, enthusiastic medical researcher who is passionate about Open Science, while an "actor" will play the role of an older, sceptical professor who is deeply rooted in traditional research practices. Two attitude scenarios will be explored. The first one, "Sceptical but Informed" the established professor is more rigid and hard to be convinced, whereas the second one "Cautiously Curious" he has reservations, but he is not entirely dismissive. A final training on how to develop an OS CV reflecting the OPUS framework will be held by M15. The training will include impact aspects, policy papers, teaching contribution, community reach, editorships, data sharing, etc. The content-based CV will contain boxes that define categories of activities that the researcher is expected to contribute to all OPUD framework OS categories. | |

| Publications, Data, Software | | | | | |
|---|---|-----------|------------|-----------------------|-------------------------------|
| Publication Drafting, Data Management, Software Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Goals of the interventions | <p>The choice of these five interventions for our university's OS pilot is driven by our overarching objective to embrace a culture of openness, collaboration, and innovation in research, aligning with global academic trends.</p> <p>These interventions collectively aim to create a supportive ecosystem for OS adoption within the university. In the short term, UCY seeks to establish the groundwork for OS, which includes developing clear policies, securing necessary resources, and implement functional repositories, while also providing essential training to our researchers. UCY believes that this can be achieved by involving high level university roles which are at a higher level of OS acknowledgment/maturity/adoption. Thus, UCY aims this chosen cohort to act as an ambassador, a best-case paradigm for other entities of the university to follow. This immediate impact sets the stage for long-term transformation. In the long term, UCY aspires to witness a significant shift in the university's research culture, where OS practices become ingrained in daily academic life. This transformation will lead to increased collaboration, transparency, and the creation of a valuable knowledge-sharing hub, benefiting not only the institution but also the broader scientific community. It should be noted that UCY had an instrumental role in formulation the National OS policy in Cyprus. Therefore, a successful implementation of this pilot could lead to enhancing/strengthening the implementation of this pilot at a national level (within academia).</p> <p>Together, these interventions will help us create a more open, innovative, and impactful research environment.</p> | | | | |
| | <p>1.Risk:</p> <ul style="list-style-type: none"> - Resistance from faculty or administration to policy changes. - Lack of clarity in policy language leading to misinterpretation. <p>Mitigation</p> <ul style="list-style-type: none"> - Engage key stakeholders in policy development to ensure their buy-in and address concerns. - Conduct workshops and seminars to clarify the policy and its implications. <p>2. Risk</p> <ul style="list-style-type: none"> - Budget constraints and inadequate funding for OS initiatives. - Competition for resources with other university priorities. <p>Mitigation</p> <ul style="list-style-type: none"> - Seek external funding and grants to supplement the budget. - Prioritise OS initiatives within the university's strategic plan to secure necessary resources. <p>3.Risk:</p> <ul style="list-style-type: none"> - Technical issues compromising the functionality of the repository. - Staff limitations - Inadequate user adoption and engagement with the repository. <p>Mitigation</p> <ul style="list-style-type: none"> - Regular technical audits and updates to safeguard functionality. - Prioritise staff resources within the university's strategic plan to secure necessary resources. - Promote the repository through workshops, webinars, and incentives to encourage use. | | | | |
| Risks and mitigations | | | | | |

| Publications, Data, Software | | | | | |
|---|---|--------------|---------------|-----------------------|-------------------------------|
| Publication Drafting, Data Management, Software Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | <p>4.Risk:</p> <ul style="list-style-type: none"> - Limited reach and impact of awareness campaigns. - Misinformation or misinterpretation of OS principles. <p>Mitigation</p> <ul style="list-style-type: none"> - Utilise various communication channels (e.g., social media, newsletters) to maximize outreach. - Develop clear and concise messaging materials to prevent misinformation. <p>5.Risk:</p> <ul style="list-style-type: none"> - Resistance to training programmes or lack of interest from faculty and researchers. - Ineffectiveness of training methods in achieving desired knowledge and skills. <p>Mitigation</p> <ul style="list-style-type: none"> - Customised training programmes to address the specific needs and concerns of different departments. - Assessment and feedback to improve the quality of training. <p>It will be essential to maintain open communication channels, involve all relevant stakeholders, and be flexible in adapting to unforeseen challenges to ensure the successful implementation of the OS pilot in the university.</p> | | | | |

The **reward system** at KIOS Center of Excellence of UCY is being updated in the context of and with the opportunity that OPUS provides. The current situation is as follows:

- Annual OS award: while it is an activity already implemented, with OPUS involvement, the application form will be updated to better capture OS aspects of the proposals. A monetary award may be considered to the 1-2 researchers with higher qualifications, to support further research.
- Recognition OPUS Champion position participation / OS ambassador role, which would give exposure, prestige, visibility.
- PCDP assessment with a high score for OS performing activities for OPUS pilot participants only.
- The possibility to include OS assessment in the PCDP forms of all personnel and link this to their job evaluation and promotion will be explored.

At an organisational level, from UCY's standpoint, the target remains to align research assessment practices with the university targets regarding the adoption of COARA principals, which include rewarding open science practices.

2.4. Information about Pilot# 3 UNIRI

The University of Rijeka (UNIRI), a higher education and research institution, has the **mission** to conduct scientific, artistic, and developmental research, engaging its staff as:

- (i) teachers, who prepare students for the jobs of the future and civic responsibility;
- (ii) researchers, who open and empower the University by boldly embarking on innovative research ventures and collaborations to develop the economy and improve the well-being of the local community; and
- (iii) citizens, who sincerely believe in the European values of freedom, human rights, and enlightenment, and are building a new European future.

As a research-oriented University, UNIRI has the **vision** to become a European University of the future.

UNIRI's **strategic objectives** are defined in four strategic areas within which the respective quantitative and qualitative development goals are defined in the following areas:

- 1) learning and teaching, promoting open education;
- 2) research, promoting innovation and the development of the economy and community;
- 3) regional involvement, promoting knowledge transfer and social responsibility for sustainable development; and
- 4) internationalisation, promoting the continuous expansion of horizons and strategic partnerships.

2.4.1 Open Science and Research Assessment at Pilot# 3 UNIRI

The following sub-sections include different policies, practices and/or initiatives that exist or are planned within the institution regarding Open Science (OS) and research assessment.

2.4.1 i) Open Science policies, practices and initiatives at Pilot# 3 UNIRI

UNIRI adopted its OS Policy⁴⁷ in 2021 and the Declaration of the University of Rijeka on European Open Science⁴⁸ in 2019.

At UNIRI there are several activities promoting OS among the University constituents, **ensuring Open Access to scientific publications** and applying the model for editing and publishing open access scientific journals (OJS) and Open Monograph Press (OMP): conference proceedings (OMP). The University's own scientific journals are a good practise example of the implementation of diamond OA.

UNIRI's OS Policy recommends a **Research Data Management Plan (RDMP)** to be developed for each research activity and the research data to be digitally linked to relevant publications. Additionally, the Croatian Science Foundation (CSF) requires a RDMP⁴⁹ to be prepared as a mandatory part of all project applications since 2022 and a similar practise is being introduced for all the internal UNIRI research projects as well. In this framework, and specifically designed to reach the Croatian research community, UNIRI developed the document How to manage research data – the handbook for the Croatian community⁵⁰.

UNIRI ensures the system of institutional repositories of the University constituents, and the University Repository⁵¹ within the national infrastructure for digital academic archives and repositories (Dabar⁵²). Dabar collects and stores scholarly, intellectual, and creative productions in digital form created by an institution (i.e., its employees and students) and provides advanced search and navigation capabilities in accordance with international standards, OpenAIRE compatibility, **FAIR principles**, and **EOSC** technical specification. Data is assigned persistent identifiers when stored in the Dabar repositories.

⁴⁷ <https://uniri.hr/en/open-science-policy/> (last accessed 22/11/2023)

⁴⁸ https://svkri.uniri.hr/images/Deklaracija_Europska_otvorena_znanost.pdf (last accessed 22/11/2023)

⁴⁹ <https://hrzz.hr/wp-content/uploads/PUIP.docx> (last accessed 22/11/2023)

⁵⁰ <https://repozitorij.srce.unizg.hr/islandora/object/srce:327> (last accessed 22/11/2023)

⁵¹ <https://www.unirepository.svkri.uniri.hr/en> (last accessed 24/11/2023)

⁵² <https://dabar.srce.hr/en> (last accessed 24/11/2023)

Although there are no specific uniformed **open research software** practices, this issue falls within the overall encouragement of OS practices at the University, as referred to in the UNIRI OS Policy⁵³.

Citizen Science is also encouraged in UNIRI's OS Policy (e.g., through collection, analysis, and dissemination of data, or (co-)financing of scientific activities). Moreover, the "Priorities for action to implement strategic policies", enshrined in the University's Strategy 2021-2025⁵⁴, include "Promoting activities in lifelong learning programmes for the community, project activities and engagement with the civic sector, science outreach activities, and the citizen science model." as part of its paragraph 3.10.

Concerning **training sessions and upskilling for OS**, the University Library established the Centre for OS and Scientific Information Management. The Centre supports research stakeholders in implementing OS practices and conducts workshops and training to increase awareness and knowledge about the importance of open scientific information and research data.

The Centre regularly hosts events on OS (such as the OS Cafés).

The UNIRI research libraries (at the UNIRI constituents) promote OS and are involved in the management of digital publications, participate in the development process of scientific communication, and implement numerous programmes (workshops, lectures, individual advice, manuals for doctoral students) intended for researchers. Its members are also part of Croatia's Research Data Alliance (RDA) node.

At UNIRI **researchers are involved in shaping policies in OS** because there is a structured policies' adoption process. It includes expert contributions with involvement of all relevant UNIRI bodies (e.g., Council for Science, Expert Committee for Research and Innovation) consisting of representatives of all the research fields, all the University constituents and similar. Before the adoption by the Senate, the pre-final draft is published for (at least) a month-long consultation process, allowing all UNIRI employees to take part in it. Comments and suggestions are then addressed, and the final post-consultation proposal is adopted by the Senate.

Furthermore, and in order to **support OS**, the UNIRI Innovation strategy, to be adopted in 2024, will also endorse OS principles.

On top of the University efforts, different partnerships promote OS as well. UNIRI is thus involved in the following **national and European OS projects**:

- Collaboration within Research Data Alliance Croatia (RDA CROATIA⁵⁵) Node.
- The Horizon 2020 YUFFERING⁵⁶ project.
- The Horizon 2020 DIOSI⁵⁷ project.

For example, within the H2020 YUFERING project, we developed the YUFERING OS Calendar⁵⁸ for 2022. UNIRI is also part of the Young European Research University Network (YERUN) and actively participates, with its vice-rector as our representative, in the respective ad-hoc group on OS and all the related activities⁵⁹. Our researchers also have the opportunity to participate in the YERUN OS Awards⁶⁰.

2.4.1 ii) Research Assessment policies and practices at Pilot# 3 UNIRI

The assessment of the researchers at the UNIRI is based on three distinctive elements:

- a) academic knowledge and skills of the researcher, where the dedication to OS instruments is particularly emphasised;
- b) skills and norms of the acceptable academic and institutional behaviour;

⁵³ <https://uniri.hr/en/open-science-policy/> (last accessed 24/11/2023)

⁵⁴ https://uniri.hr/wp-content/uploads/2021/04/University_of_Rijeka_Strategy_2021-2025.pdf (last accessed 24/11/2023)

⁵⁵ <https://www.rd-alliance.org/croatia> (last accessed 24/11/2023)

⁵⁶ <https://yufe.eu/yufering/> (last accessed 24/11/2023)

⁵⁷ <https://diosi.eu/> (last accessed 24/11/2023)

⁵⁸ <https://svkri.uniri.hr/yufering-open-science-calendar-2022/> (last accessed 24/11/2023)

⁵⁹ <https://yerun.eu/our-work/> (last accessed 24/11/2023)

⁶⁰ <https://uniri.hr/en/vijesti/yerun-open-science-awards-2022-call-now-open/> (last accessed 24/11/2023)

c) personal qualities, knowledge and skills of the researcher.

UNIRI strongly supports the concept of OS and has formally accepted (as the first in Croatia and one of the first in the EU) its own "Declaration on Open Science". The institutional funds devoted by the Ministry of Science and Education to the University of Rijeka for scientific activities are and will be distributed via transparent peer-review-based procedures to the early career researchers (ECRs) and also to more experienced researchers via UNIRI projects with special dedication to incoming researchers' mobility schemes.

The University has also introduced the role of honorary professors defined as "teachers and scientists of exceptional international reputation that actively cooperate and contribute to the activities or are willing to actively cooperate and contribute, as well as distinguish themselves, with the affiliation of the University of Rijeka". Each year at least 1-2 new honorary professors are appointed.

Regarding the area of supervisor-related policies, relations with doctoral students have witnessed a significant improvement, particularly pertaining to regulations and practices, such as the evaluative mechanisms of monitoring researcher advancement and mentor success, the definition of specific criteria for the mentors by the UNIRI Senate, which has all been further enhanced through the establishment of the Doctoral School of the University of Rijeka.

UNIRI strongly supports the view that scientific information and research data produced during publicly funded scientific activities must be publicly available and have open access, and that exceptions to this rule are acceptable only in specific cases of personal data protection, intellectual property, national security, etc. Therefore, the UNIRI has consistently adopted all the relevant OS Policy instruments.

2.4.2 Scope of the pilot and cohort for the Action Plan at Pilot# 3 UNIRI

The pilots at the University of Rijeka's Faculty of Law focus on a cohort of 17 ECRs, aiming to contribute to OS efforts in law and social sciences in general. Established 50 years ago, the Faculty has gained international recognition for its innovative and critical approach, actively engaging in collaborative research and education while embodying core values of openness, ethics, innovation, and interconnectedness.

The Faculty's commitment to OS is evident through its two open-access scientific journals, active participation in international projects, and a strategic goal to strengthen doctoral education.

The targeted 17 ECRs represent the entirety of the Faculty's ECRs, with the selection criteria including PhD Candidates and employees seven years post-PhD or under.

2.4.3 Action Plan to implement the interventions per category at Pilot#3 UNIRI

UNIRI has selected one OS indicator/metric from the **research category** (subcategory of **publications/ publication drafting**), the **education category** (subcategory of **skills/ skills development**) and the **valorisation category** (subcategory of **communication/ public speaking**). Please refer to the tables 4.1.8 to 4.1.10 in Annex I for an overview of the full set of indicators and its targets.

All the interventions in the **research category** are contributing to the indicator **"Published Publications Openly Available"**. By **"Published Publications Openly Available"** UNIRI refers to the number of publications (either author accepted manuscript or version of record/final version) openly available through the institutional repository Dabar or indexed as OA in Web of Science or Scopus, per institution (faculty), with no embargo. It may include "green" and "gold" OA. Also, all UNIRI's journals and great part of those published in Croatia are "diamond" OA.

Within the framework of institutional research funding, article processing charges (APCs) may be eligible according to available funding. In terms of copyrights, researchers are advised to use any of the CC licences, and they are made aware of the Rights Retention Strategy tendency.

The interventions in the **education category** (skills/ skills development) are contributing to the indicator **“Open Science Skills Certificates Obtained”** (tracking in % improvement).

Lastly, the interventions in the **valorisation category** (communication/ public speaking) are contributing to the indicator **“Appearances Openly Available”**.

The selection of interventions will serve to support the implementation of the indicators. In that sense, some interventions will be transversal to some categories. At UNIRI, the **policy intervention and the resources interventions** will be transversal to research category (subcategory of publications/ publication drafting), to education category (subcategory of skills/skills development) and valorisation category (subcategory of communication/public speaking).

The repository interventions will differ in each category. For the awareness raising category and training interventions, these will be implemented in a transversal way, even though the topics will be different.

Many interventions that have been further described and included in the sections 2.3.4 to 2.3.6 below will also be applied as meta-interventions at the top University level. These primarily include **policy** interventions, such as Innovation Policy, OS Policy, etc.

The **resource interventions** are entangled through the support to the Centre for OS and Scientific Information Management - hereafter COZ).

The COZ operates within UNIRI's Library and has been established as a central point of support the implementation of the OS Policy. Its activities include:

- Support for the implementation of OS practices, such as support for authors in creating and editing profiles and author identifiers (ORCID, WOS Researcher Profile, Scopus AuthorID, Google Scholar profile), workshops to develop skills for implementing OS practices, among others.
- Management of scientific information, for instance, the administration of the Dabar repository and support to the editors, or structuring data on the University's scientific productivity in the Web of Science Core Collection and Scopus databases.

Other interventions will be implemented under the **repository** (University-level data collection system and data steward, national repositories supported by UNIRI), **awareness raising** (campaigns and awareness raising also within University bodies) and **training** (fostering the training of early career researchers in OS) categories. Further information is available in the following sections.

2.4.4 Interventions within the Research category

Table 2.7: *Interventions within Publications / Publication Drafting for UNIRI*

| Publications | | | | | |
|--|-------------|-----------|------------|---|---|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1. Policy Intervention Seek senior management approval on the Rulebook on Scientific, Artistic and Innovation Activities, for implementation alongside with the Guidelines for the Institutional Criteria for Academic Staff Employment. | Achieved | - | - | This intervention is transversal to all the categories (Research/Publication Drafting, Education/Skill Development and Valorisation/Public Speaking). The Rulebook on Scientific, Artistic and Innovation Activities, alongside with the Guidelines for the Institutional Criteria for Academic Staff Employment (which includes OS elements) are seen as a prerequisite for offering a strategic direction for the University in terms of OS and its relation to research assessment. Therefore, it is important to have these two documents already in place when the pilot starts. The Guidelines for the Institutional Criteria for Academic Staff Employment have already been adopted, published and disseminated before M0. The Rulebook on Scientific, Artistic and Innovation Activities will follow the same process and be ready to be published and disseminated after formal adoption by the University's Senate by M0. Although UNIRI's faculties are autonomous vis-à-vis the Rectorate, full commitment has been obtained from the Faculty of Law and its cohort. | Vice-Rector for Strategic projects (responsible) Head of Research and Innovation (promoting/supporting/monitoring) |
| 2.1 Resource Intervention Ensure there is a member of staff responsible for monitoring, assisting with and understanding any queries that arise for OA and OS. | Achieved | - | - | These interventionis transversal to Research/ Publication Drafting and Education/ Skill Development. Action foreseen to assign staff/working hours to strengthen the Centre for OS and Scientific Information Management (COZ) within the University Library. This staff members will act as a central point of reference for Open Access and OS to support researchers, deliver training and any other tasks related to the promotion of OS. UNIRI has already in place staff addressing these tasks. PRAVRI, the institution where the target group members are, also has engaged the Head of the PRAVRI library to be involved in this. The expected time allocated to the pilot tasks is 0,1 FTE for the duration of pilot. | Head of the Centre for the Promotion of Open Science (COZ) (responsible) OPUS activity Library coordinator and other COZ Employees Head of Library at Faculty of Law (implementing) |
| 2.2 Resource Intervention | - | Achieved | - | This intervention is transversal to Research/ Publication Drafting and Education/ Skill Development. | Head of the Centre for the Promotion of Open Science (COZ) (responsible) |

| Publications | | | | | |
|---|-------------|-----------|------------|--|--|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Develop the COZ website as a central point of reference for Open Access and Open Science. | | | | This intervention will be important to strengthen the Centre for Open Science and Scientific Information Management within the University library (COZ). Although the website already exists, its content and structure need to be fully developed to work as a central point of information on OS. The fully developed website will contain sections such as: elementary information on OS, OS events (an OS calendar, trainings, webinars, networking activities etc.), OS policies within the university, OS articles, handbooks, newsfeed, etc. The website is foreseen to be fully developed and fully functional in all its aspects by M9. It already has the basic, elementary information. Also, the calendar has been developed and is regularly populated by OS activities. After the end of the pilot, the website will remain fully functional and will be continuously updated with information on trainings, events, news, etc. The latter will be part of regular COZ activities. The integration of the EduDoc website focused on ECRs (see intervention 4.1. for more details) by M9 the website will be fully completed with all foreseen functionalities. | OPUS activity Library coordinator, other COZ Employees (implementing) University IT centre and External consultants on programming (if needed, implementing) |
| 3. Repository Intervention Ensure access to suitable and easily accessible national repositories. | - | - | Achieved | <p>This intervention aims at ensuring that the OS infrastructure available for the researchers at the University is suitable and that ECRs within the cohort are aware of what is already in place. This will be done by awareness raising and training activities planned within the pilot. UNIRI has already in place a system of institutional repositories of the University bodies - University Repository⁶¹ – which links to the national infrastructure for digital academic archives and repositories (Dabar⁶²). UNIRI will reinforce institutional policy obligations towards publishing in OA by updating its policies and ensuring there is access to suitable and easily accessible national repositories and complement these with institutional repositories where necessary.</p> <p>Between M1 and M9 the OPUS team alongside with the cohorts, will evaluate the technical conditions of current repositories, make sure the cohort is aware and trained to access and use the repositories. The full implementation is foreseen at M18.</p> | <p>OPUS activity Library coordinator (responsible)</p> <p>Head of the Centre for the Promotion of Open Science (COZ) other COZ Employees</p> <p>Head of Library at Faculty of Law (implementing)</p> |

⁶¹ <https://www.unirepository.svkri.uniri.hr/en> (last accessed 24/11/2023)

⁶² <https://dabar.srce.hr/en> (last accessed 24/11/2023)

| Publications | | | | | |
|---|-------------|-----------|------------|--|---|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 4.1 Awareness Raising Intervention Establish COZ website as a communication tool towards ECRs at UNIRI to raise awareness and promote the UNIRI OS Policy and COZ services. | - | Achieved | - | <p>These intervention is transversal to Research/ Publication Drafting and Education/ Skill Development.</p> <p>The COZ website will be fully developed by M9. Its primary function will be to raise awareness on OS through its content, which will be shared via social media and dedicated ECR communication and social media groups.</p> <p>In this regard, pilot project activities in the period from M0 from M9 will focus on raising awareness of the existence of COZ and its role as the central point for OS issues for all UNIRI employees. <i>An ECR-focused website, EduDoc, will be developed by M7 and functionally integrated within the CoZ website by M9.</i></p> | Head of the Centre for the Promotion of Open Science (COZ) (responsible) OPUS activity Library coordinator, other COZ Employees (implementing) |
| 4.2 Awareness Raising Intervention Organise Open Science Cafes to raise awareness and promote the UNIRI Open Science Policy and COZ services (# of cafes). | 0 | 3 | 6 | <p><i>UNIRI will organise 3 OS Cafes by M9 and other 3 between M10 and M18.</i></p> <p>The OS cafés will run for 90 minutes including Q&A and informal networking at the end of the session. The OS cafés will be public events fully open to the UNIRI research community, <i>ECRs are specifically motivated to apply.</i></p> <p>Attendance of participants will be monitored. Participants will register via a Google form. Materials will be openly available through the institutional repository (UNIRI Digital Library) and <i>through Zenodo, for greater visibility and ensuring they are openly available to anyone.</i></p> <p>The number of participants is unlimited, and participants receive a certificate of attendance.</p> <p>Future cafes will cover topics such as:</p> <ul style="list-style-type: none"> - OA - green and gold (repositories, journal selection, avoiding predatory journals); - legal and copyright issues; - any other OS topics proposed by pilot participants or considered important by the UNIRI OPUS team interaction with ECRs. <p>The programmes are led by COZ members and external experts.</p> | Head of Library at Faculty of Law (contributing) Head of the Centre for the Promotion of Open Science (COZ) (responsible) OPUS activity Library coordinator, other COZ Employees (implementing) |
| 5. Training Intervention Train ECRs in Open Access | 0 | 1 | 3 | <p>These interventions are transversal to Research/ Publication Drafting and Education/ Skill Development.</p> | Head of Library at Faculty of Law and Head of the Centre for the Promotion of Open Science (COZ) (responsible) |

| Publications | | | | | |
|--|---|-----------|------------|---|---|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| publication skills and provide best practice examples (# of sessions). | | | | <p>UNIRI has organised 1 training session in M3 and other 2 are planned between M10 and M18. The training sessions will be held online. Each session consists of 5 modules chronologically following the process of writing, publishing and evaluation of research publications. OA experts may be invited to share best practices, providing practical guidance. Other training content may focus on OA publishing platforms and repositories, ethical considerations, as well as monitoring and evaluation of OA impact. The module's topics are as follows: information services for researchers and tools to raise author visibility, search tool for research sources, tools for managing research information, tools for publishing research publications, tools for the evaluation of research publications and journals. Open Science is adequately addressed within each of the modules.</p> <p>Participants register via a Library website. Attendance of participants is monitored. The number of participants is unlimited, and participants receive a certificate of attendance separately for each module. Materials from the workshop are sent to the participants via e-mail.</p> <p>Training sessions to be organised for ECRs at PRAVRI are aimed to ensure OA to publications by participation in a cycle of workshops on legal scientific communication called "Who is Q", in close cooperation with the Vice Dean for Science (as part of the Ri DOC doctoral study). The main subjects of the workshops will deal with the topics related to: publication in OA and storage of papers, the role of institutional repositories, Creative Commons licenses (licenses are permissions given by the copyright holders for their content which are updated based on the established acts of the University and also the general policy of the European Union according to research data and results). The workshop will run for 90 minutes including Q&A. Timeline for the training sessions for young researchers will be defined by M1 and happen in the period up to M18. The quality and effectiveness of the trainings will be measured to improve and allow for the trainings to become part of the regular training offer.</p> <p>In addition, the publication Guidelines for publishing papers in the European Research Area will be published between M9 and M18.</p> | OPUS activity Library coordinator, other COZ Employees (implementing) |
| Goals of the interventions | The interventions were chosen for their importance for ECRs, OA repositories available for publications upload and publication data and the ease of access to data and data management. | | | | |

| Publications | | | | | |
|-----------------------|-------------|-----------|------------|---|-------------------------------|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <p>More particularly, ECRs should be more aware of the benefits of opening their publications and data. On the other hand, team members are in direct contact with the target group and the interventions foreseen above are steps to be integrated into activities of the process owners who oversee implementing these.</p> <p>Traditionally, the publications of the UNIRI researchers in jurisprudence and the related disciplines are not openly available, and this tradition is normally not questioned by ECRs. The activities within the OPUS pilot should change this. Short term, the pilot aims to raise awareness among ECRs (but indirectly also to other researchers at UNIRI) regarding the importance of open research publications and the relevant contribution of OS to the future of research assessment. Long term, the pilot activities will contribute to a better visibility of the research performed at UNIRI and increase the quality of research outputs.</p> | |
| Risks and mitigations | | | | <ol style="list-style-type: none"> Risk: Delay on the process of approval and publishing the Rulebook on Scientific, Artistic and Innovation Activities, increase of procedural and administrative requirements associated with the process or unforeseen events that may change priorities. Mitigation: Top-down, leadership involvement for prioritisation. Risk: Delay in the website development. Mitigation: Close monitoring to the process of development. Risk: Incomplete or inaccurate assessment may lead to the selection of less adequate repositories. Mitigation: Assuring the assessment will be done correctly. Risk: Lack of engagement/participation from the cohorts. Mitigation: Involvement of the cohorts so that ECR feel they are part of the process, through rewards system; senior management involvement from the very beginning; implement monitoring instruments to awareness and training sessions. | |

2.4.5 Interventions within the Education category

Table 2.8: *Interventions within Skills / Skills Development for UNIRI*

| Skills | | | | | |
|--|-------------|-----------|------------|---|---|
| Skills Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1. Policy Intervention Seek senior management approval on the Rulebook on Scientific, Artistic and Innovation Activities, for implementation alongside with the Guidelines for the Institutional Criteria for Academic Staff Employment. | Achieved | - | - | This intervention is transversal to all the categories (Research/Publication Drafting, Education/Skill Development and Valorisation/Public Speaking). The Rulebook on Scientific, Artistic and Innovation Activities, alongside with the Guidelines for the Institutional Criteria for Academic Staff Employment (which includes OS elements) are seen as a prerequisite for offering a strategic direction for the University in terms of OS and its relation to research assessment. Therefore, it is important to have these two documents already in place when the pilot starts. The Guidelines for the Institutional Criteria for Academic Staff Employment have already been adopted, published and disseminated before M0. The Rulebook on Scientific, Artistic and Innovation Activities will follow the same process and be ready to be published and disseminated after formal adoption by the University's Senate by M0. Although UNIRI's faculties are autonomous vis à vis the Rectorate, full commitment has been obtained from the Faculty of Law and its cohort. | Vice-Rector for strategic projects (responsible) Head of research and innovation (promoting/supporting/monitoring) |
| 2.1 Resource Intervention Ensure there is a member of staff responsible for monitoring, assisting with and understanding any queries that arise for OA and OS. | Achieved | - | - | This intervention is transversal to Research/ Publication Drafting and Education/ Skill Development. Action foreseen to assign staff/working hours to strengthen the Centre for OS and Scientific Information Management (COZ) within the University Library. This staff members will act as a central point of reference for Open Access and OS to support researchers, deliver training and any other tasks related to the promotion of OS. UNIRI has already in place staff addressing these tasks. PRAVRI, the institution where the target group members are, also has engaged the Head of the PRAVRI library to be involved in this. The expected time allocated to the pilot tasks is 0,1 FTE for the duration of pilot. | Head of the Centre for the Promotion of Open Science (COZ) (responsible) OPUS activity Library coordinator, other COZ Employees and University IT centre and External consultants on programming (if needed) (implementing) |
| 2.2 Resource Intervention | | Achieved | | This intervention is transversal to Research/ Publication Drafting and Education/ Skill Development. | Head of the Centre for the Promotion of Open Science (COZ) |

| Skills | | | | | |
|---|-------------|-----------|------------|---|--|
| Skills Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Develop COZ website as a central point of reference for Open Access and Open Science. | | | | This intervention will be important to strengthen the Centre for Open Science and Scientific Information Management within the University library (COZ). Although the website already exists, its content and structure need to be fully developed to work as a central point of information on OS. The fully developed website will contain sections such as: elementary information on OS, OS events (an OS calendar, trainings, webinars, networking activities etc.), OS policies within the university, OS articles, handbooks, newsfeed, etc. The website is foreseen to be fully developed and fully functional in all its aspects by M9. It already has the basic, elementary information. Also, the calendar has been developed and is regularly populated by OS activities. After the end of the pilot, the website will remain fully functional and will be continuously updated with information on trainings, events, news, etc. The latter will be part of regular COZ activities. <i>With the integration of the EduDoc website focused on ECRs (see intervention 4.1. for more details) by M9 the website will be fully completed with all foreseen functionalities.</i> | (responsible) OPUS activity Library coordinator, other COZ Employees and University IT centre and External consultants on programming (if needed) (implementing) |
| 3. Repository Intervention Develop the skills of ECRs to the level where they can autonomously use the national repositories and complementary institutional repositories (% skills improvement). | 0% | 33% | 67% | This intervention aims at ensuring that the OS infrastructure available for the researchers at the University is suitable and that ECRs within the cohort are aware of what is already in place. This will be done by awareness raising and training activities planned within the pilot. UNIRI has already in place a system of institutional repositories of the University bodies - University Repository ⁶³ – which links to the national infrastructure for digital academic archives and repositories (Dabar ⁶⁴). UNIRI will reinforce institutional policy obligations towards publishing in Open Access by updating its policies and ensuring there is access to suitable and easily accessible national repositories and complement these with institutional repositories where necessary. Between M1 and M9 the OPUS team alongside with the cohorts, will evaluate the technical conditions of current repositories make sure the cohort is well aware and trained to access and use the repositories. The full implementation is foreseen at M18. | Head of Library at Faculty of Law Head of the Centre for the Promotion of Open Science (COZ) (responsible) OPUS activity Library coordinator, other COZ Employees (implementing) |
| 4.1 Awareness Raising Intervention | - | Achieved | - | This intervention is transversal to Research/ Publication Drafting and Education/ Skill Development. | Head of Library at Faculty of Law (contributing) |

⁶³ <https://www.unirepository.svkri.uniri.hr/en> (last accessed 24/11/2023)

⁶⁴ <https://dabar.srce.hr/en> (last accessed 24/11/2023)

| Skills | | | | | |
|---|-------------|-----------|------------|--|--|
| Skills Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Establish COZ website as a communication tool towards ECRs at UNIRI to raise awareness and promote the UNIRI OS Policy and COZ services. | | | | <p>The COZ website will be designed between M1 and M9 and is expected to be running by M9.</p> <p>In this regard, pilot project activities will in the period from M0 from M9 will work on raising awareness of the existence of COZ and its role as the central point for OS issues for all UNIRI employees.</p> <p>An ECR-focused website, EduDoc, will be developed by M7 and functionally integrated within the CoZ website by M9.</p> | <p>Head of the Centre for the Promotion of Open Science (COZ) (responsible)</p> <p>OPUS activity Library coordinator, other COZ Employees (implementing)</p> |
| <p>4.2 Awareness Raising Intervention</p> <p>Organise Open Science Cafes to raise awareness and promote the UNIRI Open Science Policy and COZ services (# of cafes).</p> | 0 | 3 | 6 | <p>This intervention is transversal to Research/ Publication Drafting and Education/ Skill Development.</p> <p>UNIRI will organise 3 OS Cafes by M9 and other 3 between M10 and M18.</p> <p>The OS cafés will run for 90 minutes including Q&A and informal networking at the end of the session. The OS cafés will be public events fully open to the UNIRI research community, ECRs are specifically motivated to apply.</p> <p>Attendance of participants will be monitored. Participants will register via a Google form. Materials will be openly available through the institutional repository (UNIRI Digital Library) and through Zenodo, for greater visibility and ensuring they are openly available to anyone.</p> <p>The number of participants is unlimited, and participants will receive a certificate of attendance.</p> <p>Cafes will cover topics such as:</p> <ul style="list-style-type: none"> - OA - green and gold (repositories, journal selection, avoiding predatory journals); - legal and copyright issues; - any other OS topics proposed by pilot participants or considered important by the UNIRI OPUS team interactions with ECRs. | <p>Head of Library at Faculty of Law (contributing)</p> <p>Head of the Centre for the Promotion of Open Science (COZ) (responsible)</p> <p>OPUS activity Library coordinator, other COZ Employees (implementing)</p> |
| <p>5. Training Interventions</p> <p>Train ECRs in Open Access publication skills and provide best</p> | 0 | 1 | 3 | <p>This intervention is transversal to Research/ Publication Drafting and Education/ Skill Development.</p> <p>UNIRI will organise 1 training session by M9 and other 2 between M10 and M18. The training sessions will be held online. Each session consists of 5 modules chronologically following the process of writing, publishing and evaluation of</p> | <p>Head of Library at Faculty of Law and</p> <p>Head of the Centre for the Promotion of Open Science (COZ) (responsible)</p> |

| Skills | | | | | |
|------------------------------------|-------------|-----------|------------|--|---|
| Skills Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| practice examples (# of sessions). | | | | <p>research publications. OA experts will be invited to share best practices, providing practical guidance. Other training content may focus on OA publishing platforms and repositories, ethical considerations, as well as monitoring and evaluation of OA impact. The module's topics are: information services for researchers and tools to raise author visibility, search tool for research sources, tools for managing research information, tools for publishing research publications, tools for the evaluation of research publications and journals. Open Science is adequately addressed within each of the modules.</p> <p>Participants will register via the library website. Attendance of participants will be monitored. The number of participants is unlimited, and participants will receive a certificate of attendance separately for each module. Materials from the workshop will be sent to the participants via e-mail.</p> <p>Training sessions to be organised for ECRs at PRAVRI are aimed to ensure OA to publications by participation in a cycle of workshops on legal scientific communication called "Who is Q", in close cooperation with the Vice Dean for Science (as part of the Ri DOC doctoral study). The main subjects of the workshops will deal with the topics related to: publication in OA and storage of papers, the role of institutional repositories, Creative Commons licenses (licenses are permissions given by the copyright holders for their content which are updated based on the established acts of the University and also the general policy of the European Union according to research data and results). The workshop will run for 90 minutes including Q&A. Timeline for the training sessions for young researchers will be defined by M1 and happen in the period up to M18. The quality and effectiveness of the trainings will be measured to improve and allow for the trainings to become part of the regular training offer.</p> <p>In addition, the publication Guidelines for publishing papers in the European Research Area will be published between M9 and M18.</p> <p>The Faculty of Law will engage in training sessions for young researchers (interactive lectures, seminars, and tutorials: learning by talking) covering information literacy programmes - OA topics and Open-Source software: OJS and OMP. A minimum of 2 trainings are planned specifically for the target group at PRAVRI during the pilot time.</p> | OPUS activity Library coordinator, other COZ Employees (implementing) |

| Skills | | | | | |
|----------------------------|---|-----------|------------|-----------------------|-------------------------------|
| Skills Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Goals of the interventions | <p>These interventions have been chosen because they fit well into the strategic vision for OS at UNIRI. Also, for their importance for ECRs, OA repositories available for publications upload and publication data and the ease of access to data and data management. Short term, ECRs should be more aware of the benefits of OS and the repositories and services available at UNIRI. To facilitate the process, the UNIRI OPUS team members are in direct contact with the target group and the interventions foreseen above are steps to be integrated into activities of the process owners who are in charge of implementing these. Also, in the short term, the pilot aims to raise awareness among ECR specifically (also indirectly to other researchers at UNIRI), about the importance of open research publications and the relevant contribution of OS to the future of research assessment. The general short and long-term goals are the same as described in table 2.6., above.</p> | | | | |
| Risks and mitigations | <ol style="list-style-type: none"> Risk: Delay on the process of approval and publishing the Rulebook on Scientific, Artistic and Innovation Activities, increase of procedural and administrative requirements associated with the process or unforeseen events that may change priorities. Mitigation: Top-bottom, leadership involvement for prioritisation. Risk: Delay in the website development. Mitigation: Close monitoring to the process of development. Risk: Incomplete or inaccurate assessment may lead to the selection of less adequate repositories. Mitigation: Assuring the assessment will be done correctly. Risk: Lack of engagement/participation from the cohorts. Mitigation: Involvement of the cohorts so that ECR feel they are part of the process, through rewards system; senior management involvement from the very beginning; implement monitoring instruments to awareness and training sessions. | | | | |

2.4.6. Interventions within the Valorisation category

Table 2.9: *Interventions within Communication / Public Speaking for UNIRI*

| Communication Public Speaking | | | | | |
|--|----------------|--------------|---------------|--|--|
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1. Policy Intervention Seek senior management approval on the Rulebook on Scientific, Artistic and Innovation Activities, for implementation alongside with the Guidelines for the Institutional Criteria for Academic Staff Employment. | Achieved | - | - | <p>This intervention is transversal to all the categories (Research/Publication Drafting, Education/Skill Development and Valorisation/Public Speaking).</p> <p>The Rulebook on Scientific, Artistic and Innovation Activities, alongside with the Guidelines for the Institutional Criteria for Academic Staff Employment (which includes OS elements) are seen as a prerequisite for offering a strategic direction for the University in terms of OS and its relation to research assessment. Therefore, it is important to have these two documents already in place when the pilot starts.</p> <p>The Guidelines for the Institutional Criteria for Academic Staff Employment have already been adopted, published and disseminated before M0. The Rulebook on Scientific, Artistic and Innovation Activities will follow the same process and be ready to be published and disseminated after formal adoption by the University's Senate by M0. Although UNIRIS's faculties are autonomous vis à vis the Rectorate, full commitment has been obtained from the Faculty of Law and its cohort.</p> | Vice-Rector for Strategic Projects (responsible) Head of Research and Innovation (promoting/supporting/monitoring) |
| 2.1 Resource Intervention Provide expertise and support in public speaking by establishing the Centre for Science Outreach (SOCRI). | Achieved | - | - | <p>The Science Outreach Centre (SOCRI) is dedicated to the design, organization, and implementation of activities aimed at the popularisation of science in the broadest sense and the promotion of all scientific and artistic activities of the University. The Centre pays special attention to designing activities organized in cooperation with the local community, with special emphasis on activities organized for the young and activities aimed at preserving Rijeka's regional scientific and technological heritage.</p> <p>SOCRI's function in relation to this Action plans to provide expertise and support in public outreach activities to researchers.</p> <p>Planning of Kick-start the factual activities of the newly established Centre for Science Outreach (SOCRI). This is a starting point for all other activities related to the pilot in the Valorisation category.</p> | Centre for Science Outreach: SOCRI (Head of Centre) (responsible) Centre for Science Outreach: SOCRI (collaborators as support) |

| Communication | | | | | |
|--|-------------|-----------|------------|--|---|
| Public Speaking | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 2.2 Resource Intervention Set up SOCRI website to provide expertise and support in public speaking online. | - | - | Achieved | The SOCRI website will include basic information of SOCRI has already been set up to minimise the risks of programming delays. However, to function as a digital support for public speaking and outreach activities, it will be continuously developed throughout the pilot between M1 and M18, up to its full functionality as a central point for all UNIRI researchers. | Centre for Science Outreach: SOCRI (Head of Centre) (responsible) Centre for Science Outreach: SOCRI (collaborators as support) |
| 3. Repository Intervention Develop a digital platform on the SOCRI website to store data from outreach activities such as public speaking appearances. | - | Achieved | - | <p>This action foresees the creation of a repository linked to the SOCRI website to store data from outreach activities, such as public speaking appearances. So far, public appearances could not be made available to a wider audience because there was (i) neither expertise (ii) nor the tools to record public speaking events. Between M1 and M9 UNIRI will start communicating about the possibility to use the repository and SOCRI services to record public speaking events. By M0 the first videos will be uploaded into the repository to show the potential and start repository pilot operation.</p> <p>The SOCRI team is committed to make public outreach truly public. They are establishing a dedicated repository on the SOCRI website to house data from public speaking engagements and events featuring their researchers. Up until now, the challenge has been the lack of both expertise and tools to capture and share these moments with a broader audience.</p> <p>The roadmap is laid out between M1 and M9. During this time, the groundwork, the foundation that needs to be solid before UNIRI can showcase public outreach efforts. Therefore, by M0, the team plans to kick off the repository pilot operation. The first step is to begin uploading videos into the repository. This is not just about storing data; it is about demonstrating the potential of the repository in action. As the videos make their way into the repository, the team will simultaneously start spreading the word. Communication about the availability of the repository and the services offered by SOCRI will begin, creating awareness and setting the stage for a more open and accessible era of public outreach.</p> <p>This plan not only ensures a smooth technical transition but also emphasizes the importance of communication and engagement, making sure that the public is aware of this new avenue for accessing valuable content from SOCRI's public speaking engagements. It's a thoughtful and strategic approach to bring about positive change in the way public outreach is handled.</p> | Centre for Science Outreach: SOCRI (Head of Centre) (responsible) Centre for Science Outreach: SOCRI (collaborators) External programmer (as support) |

| Communication | | | | | |
|--|-------------|-----------|------------|---|---|
| Public Speaking | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <p>At the beginning of the academic year 2024/2025 (M9), the contents collected up to that point will be systematized and categorized. Additionally, a functional virtual SOCRI will be designed and implemented. This virtual platform will include instructions for the University's components and scientists on how and which contents they can propose for inclusion in the virtual SOC repository.</p> <p>By the end of the academic year 2024/2025, the virtual SOC will be fully functional. In collaboration with IT services, a technical support system for creating video content will be established.</p> | |
| 4. Awareness Raising Intervention Run awareness sessions for researchers addressing the benefit to ECRs and the institution of recording information about public speaking, ensuring that they trust the process and understand the link to researcher assessment (# of sessions). | 0 | 1 | 2 | <p>UNIRI will organise 1 awareness session by M9 and another between M10 and M18.</p> <p>This is an important action to widely disseminate information on the availability of newly established tools, expertise and services available to all UNIRI researchers. This will remain a continuous activity after the duration of the pilot.</p> <p>In the first quarter of 2024, with the goal of promoting the University's programmes to high school graduates and prospective students, there will be an intensified call to the University's components to create and/or share various video materials. These materials will be promoted through SOCRI's communication channels and also featured in events organised or co-organised by the Center, such as <i>Rijeka Tehnologije</i> in February 2024, the Science Festival in April 2024, and the Science Pint in May 2024.</p> <p>Further details on topics, scope, duration, dissemination, participants and materials is still to be defined.</p> | Centre for Science Outreach: SOCRI (Head of Centre) (responsible) Centre for Science Outreach: SOCRI (collaborators) External collaborators - experts |
| 5. Training Intervention Train ECRs on Public Outreach Activities (# of courses). | 0 | 1 | 3 | <p>UNIRI will organise 1 training session by M9 and other 2 between M10 and M18.</p> <p>This action foresees training courses on outreach activities, providing best practice examples and case studies of public speaking and ensure ECRs know where to find support in public speaking on scientific topics (# courses). This will remain a continuous activity after the duration of the pilot. At least one session will focus on the conceptualisation and creation of repository-adequate video content aimed at promoting science.</p> | Centre for Science Outreach: SOCRI (Head of Centre) (responsible) Centre for Science Outreach: SOCRI (collaborators) |

| Communication | | | | | |
|----------------------------|---|-----------|------------|-----------------------|-------------------------------|
| Public Speaking | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Goals of the interventions | <p>These interventions have been selected for several reasons. First, the important role of science outreach and public speaking skills for the development of ECRs. Second, in line with the strategic vision of the University, the Science Outreach Centre has recently been established as a central point providing science outreach services for UNIRI. The pilot will contribute to reinforce, further develop and tailor SOCRI activities to meet the needs of UNIRI researchers, especially the pilot target group. While in short term -during the pilot- SOCRI will develop its initial services, trainings and the website as a digital tool for science outreach, it will implement all of the above interventions and integrate them into their regular activities to ensure sustainability. In the long term, the pilot activities will contribute to a better visibility of research performed at UNIRI, better understanding of research due to improved researchers' science communication skills and contribute to the increase of trust in science among the general public.</p> | | | | |
| Risks and mitigations | <ol style="list-style-type: none"> Risk: Delay on the process of approval, publishing and awareness on the Rulebook on Scientific, Artistic and Innovation Activities, increase of procedural and administrative requirements associated with the process or unforeseen events that may change priorities. Mitigation: Top-bottom, leadership involvement for prioritisation. Risk: Delay in the website development. Mitigation: Close monitoring to the process of development. Risk: Incomplete or inaccurate assessment may lead to the selection of less adequate repositories. Mitigation: The SOCRI website itself will incorporate the repository in form of videos. It will thus be under its direct control. Video recording equipment has already been purchased. Risk: Lack of engagement/participation from the cohorts. Mitigation: Involvement of the cohorts so that ECR feel they are part of the process, through rewards system; senior management involvement from the very beginning; implement monitoring instruments to awareness and training sessions. | | | | |

In recognition of the invaluable contributions made by the ECRs in advancing the University's OS initiatives, a distinctive **reward system** has been established. As a token of appreciation for their active engagement, participants will be presented with a Certificate of Contribution to the Development of the OS System at UNIRI.

This certificate symbolises the pivotal role each ECRs has played in shaping and enhancing UNIRI's OS framework. To elevate this recognition, a special side event will be organised, where these certificates will be formally introduced to the University community, including their presentation by the Rector.

Moreover, the commitment extends beyond a one-time acknowledgment. UNIRI is dedicated to continuously promoting the OS efforts of these researchers as they progress in their research careers. This ongoing support aims to ensure that their dedication to OS becomes an integral part of their professional narrative, contributing not only to the University's development, but also to the broader landscape of research excellence.

When relevant, the target group may be nominated for relevant OS awards by other organisations, for example through the YERUN Open Science awards⁶⁵, or similar.

⁶⁵ <https://yerun.eu/2023/11/yerun-open-science-awards-2023-now-open-apply-by-5-december/> (last accessed 24/11/2023)

2.5. Information about Pilot#4 UEFISCDI

The Executive Agency for Higher Education, Research, Development and Innovation Funding, as a funding agency under the authority of the Romanian Ministry of Education, works in close collaboration with the Ministry of Research, Innovation and Digitalisation. UEFISCDI's **mission** is to promote quality and leadership for higher education, research, development and innovation.

UEFISCDI **vision** is to contribute to the internationalisation of Romanian Higher Education and research, through the development of real instruments of scientific and cultural diplomacy.

UEFISCDI's **strategic objectives** are:

- 1) To set up the framework for higher education and scientific research within the national budget and other sources.
- 2) To fund high quality research projects in Romania.
- 3) To provide science policy expertise.

Along with the attributions aimed at financing higher education and research, UEFISCDI is recognised nationally and internationally as the organisation using methods and techniques of structured analysis and consultation combined in the concept of foresight for institutional and system development projects regarding to higher education, research, development and innovation.

2.5.1 Open Science and Research Assessment at Pilot#4 UEFISCDI

The following sub-sections include different policies, practices and/or initiatives that exist or are planned within the institution regarding OS and research assessment.

2.5.1 i) Open Science policies, practices and initiatives at Pilot#4 UEFISCDI

OS strategic objectives in Romania are addressed within key national strategic documents launched in 2022. Within these, core provisions refer to **ensuring OA** in scientific publications resulting from publicly funded research. The National Strategy on Research, Innovation and Smart Specialisation for 2022-2027 (NRIS3 2022-2027)⁶⁶, hereafter 'The National Strategy', states the obligation to publish in OA journals from the mainstream of knowledge, or in OA platforms, with APCs being considered eligible costs, and ensures OA to scientific publications resulting from publicly funded research starting with the new research funding cycle until 2030. Gold, green routes are accepted, and publications in hybrid journals should only be accepted in the transition to OS for a determined period. Additionally, ensuring transparency, equity of the APCs and of the costs of accessing international scientific databases is also enshrined in the strategic objectives.

The National Strategy also foresees **mandatory data management plans (DMPs)** for RDI projects funded with public funds and with research infrastructures receiving support for its development and implementation. The costs associated with the research data management will be considered eligible costs. Grants should be awarded for the preparation of the scientific data in order to store them in OA repositories. Additionally, the White Paper on the Transition to Open Science 2023-2030⁶⁷, hereafter 'the White Paper', also states that research data management must become a standard, comply with the **FAIR principles** and be based on a DMP. This document further recommends other types of research results (other than research data), such as **software**, be managed according to FAIR principles and, to the extent possible, kept open access.

Citizen science is also supported by the National Strategy in one of its actions. In addition to encouraging citizen participation in defining the strategic research agenda, the Strategy will support projects that encourage citizen involvement in various stages of the research process, such as data collection. The White Paper also supports and encourages the involvement of citizens in different stages of the scientific research process within publicly funded project and proposes specific actions in this regard. Additionally, within the

⁶⁶ <https://www.research.gov.ro/uploads/comunicate/2022/strategia-na-ional-de-cercetare-inovare-i-specializare-inteligent-2022-2027.pdf> (last accessed 24/11/2023)

⁶⁷ <https://www.open-science.ro/resurse/cartea-alba-a-tranzitiei-catre-stiinta-deschisa-2023-2030> (last accessed 24/11/2023)

National Plan for RDI⁶⁸ (which implements the National Strategy), two programs (Science and Society and Challenge Program) address societal dialogue and to open the R&I processes to society.

The development of **OS-specific skills and competences** of researchers and personnel of academic and research institutions is mentioned in The National Strategy (objective 1.2) and a dedicated strategic objective (6) to capacity building in OS is foreseen in The White Paper. Additionally, the National Fund for the Institutional Development of the public universities⁶⁹ has a dedicated action (starting 2022) to support universities to develop their institutional capacity to implement OS practices.

Starting in 2020, **researchers have been involved** in different dissemination and consultation phases as part of the process of developing the National Strategy led by the Open Science Knowledge Hub Romania (OSKH-UEFISCDI). In the same vein, and to **support the transition to OS**, both the National Strategy and the White Paper stress the need for a clear, sustainable governance mechanism. The creation of a Council for OS has been proposed for that matter.

In terms of **OS support**, UEFISCDI created in 2019 the Open Science Knowledge Hub to offer support for OS at national level (awareness raising, policy support, OS practices support). Current core activities include:

- the development of the national OS strategic framework and expert advice at national level on its implementation;
- coordination of the RO-NOSCI (National Open Science Cloud Initiative);
- member in the EOSC Association;
- participation in the actions of the Coalition for Advancing Research Assessment (CoARA) WGs⁷⁰, Open Research Assessment Dataspace⁷¹ project (GraspOS) and involved in the international networks such as: OpenAIRE⁷² (as National Open Access Desks), Research Data Alliance⁷³, Council for National Open Science Coordination (CoNOSC)⁷⁴ and Science Europe⁷⁵;
- management of the national OS portal⁷⁶ and the recent developed OS national community.

UEFISCDI developed and administrates (in house) the following platforms relevant in the context of the pilot activity:

- 1) BrainMap⁷⁷. The online community of researchers, innovators, technicians and entrepreneurs, a platform that comprises around 56 000 accounts for users globally and provides information regarding over 10 000 R&I projects, research outputs, among others. Brainmap is also used as a pool for selecting international experts as reviewers for projects submitted under different funding calls. Being registered in BrainMap is a conditionality for accessing RDI public funds.
- 2) UdiManager⁷⁸. A 'one-stop shop' platform that facilitates the implementation of R&D project calls, such as the ones under the National Plan for RDI (2022-2027), the National Recovery and Resilience Plan, and certain international funding calls where UEFISCDI acts as program manager. The platform was created in 2011 and until this year it has provided support for the evaluation process for over 125 000 project proposals.
- 3) EVoC⁷⁹ - Contracting, monitoring and results platform, for funded projects. The platform has facilitated the management of over 6000 projects.
- 4) EERTIS⁸⁰ - Engage in the European Research and Technological Infrastructures System, it is a platform which provides access to information on 2000 national and international infrastructures, 10 000 research and technological services and +29 000 equipment, and acts as a single access

⁶⁸ <https://www.research.gov.ro/wp-content/uploads/2022/12/hg-aprobare-pncdi-iv.pdf> (last accessed 24/11/2023)

⁶⁹ <https://uefiscdi.gov.ro/fondul-de-dezvoltare-institutionala-fdi> (last accessed 24/11/2023)

⁷⁰ <https://coara.eu/> (last accessed 24/11/2023)

⁷¹ <https://graspos.eu/> (last accessed 24/11/2023)

⁷² <https://www.openaire.eu/> (last accessed 24/11/2023)

⁷³ <https://www.rd-alliance.org/> (last accessed 24/11/2023)

⁷⁴ <https://conosc.org/#page-content> (last accessed 24/11/2023)

⁷⁵ <https://scienceeurope.org/> (last accessed 24/11/2023)

⁷⁶ <https://www.open-science.ro/> (last accessed 24/11/2023)

⁷⁷ <https://www.brainmap.ro/> (last accessed 24/11/2023)

⁷⁸ <https://uefiscdi-direct.ro/index.php> (last accessed 24/11/2023)

⁷⁹ <https://evoc.uefiscdi-direct.ro> (last accessed 24/11/2023)

⁸⁰ <https://eertis.eu/> (last accessed 24/11/2023)

point for the respective research and technology infrastructures and their associated resources. Through this platform, users may access to templates for access policy and data management plans. Being registered in EERTIS is a conditionality for accessing RDI public funds.

2.5.1 ii) Research Assessment policies and practices at Pilot#4 UEFISCDI

Researchers are not evaluated at UEFISCDI for career progression purposes. However, their profiles and resumes can be evaluated as part of different funding instruments, which are tailored to its specificities and objectives. This is why the way in which researchers' profiles (and more frequently, the profiles of the Principal Investigators, PIs) are evaluated can differ between funding instruments.

For example, in the case of the Centres of Excellence (CoE) funding instrument⁸¹, the PI proposed for the role of Director is assessed according to aspects such as proven ability to conduct ground-breaking research, scientific expertise, leadership and research management skills (including leadership in training and mentoring young scientists).

Project applications for the CoE funding instrument are evaluated based on 3 general criteria - Excellence (40% of the total), Impact (30%) and Implementation (30%). Moreover, the profiles of the Centres' Directors are evaluated as part of the implementation criteria together with other aspects such as the profiles of group leaders and staff key members, the way in which the Centre is planned to be organised, as well as the proposed work plan and schedule.

In the case of CoE funding Programme, the evaluation is done both at the level of PIs and research teams. CoE will be established on the basis of a partnership between research teams from at least 4 research organizations with a common research and innovation agenda and plan. In the case of Exploratory Research Projects funding instrument⁸², certain evaluation criteria are directly related to PIs (40%). Aspects such as the quality, visibility, and impact research output, as well as the match between research output and the topic proposed for the research project proposal are considered.

Currently, at the institutional level, OS is not included in the assessment system.

UEFISCDI is the Programme Operator (PO) for Research within the EEA & Norway Grants Financial Mechanism. In its role as PO for Research, UEFISCDI looks at the following indicators **monitoring OS**:

- Number of scientific publications available in OA;
- Number of research data sets available in OA;
- Number of Data Management Plans (DMPs).

In terms of **policies**, the institutional approach aligns with the national RDI - Research, Development and Innovation (RDI) provisions and according to the decisions taken by the Ministry of Research, Innovation and Digitalization (MCID) in terms of RDI funds allocation.

The adoption of new research and career evaluation metrics in the context of OS is mentioned in the National Strategy (Objective 1.2). The White Paper dedicates a strategic objective (SO7) to the adaptation of research assessment and rewarding with a view to OS. The SO7 proposes actions aligned with international recommendations such as the CoARA's Agreement on Reforming Research Assessment and the Council conclusions on Research Assessment and implementation of Open Science (2022).

When it comes to designing the grants evaluation process for different funding instruments, the process unfolds as follows:

1. UEFISCDI elaborates (mandated by the MCID) a first draft of the information package, that includes information on aspects such as the goal and specific objectives of the call, conditions for participation, eligible expenses, duration, budget, ethics, ensuring equal opportunities, the

⁸¹ according to the Information package that was launched for public consultation (September 2023)

- <https://uefiscdi.gov.ro/news-dezbateri-publica-pachet-informatii> (last accessed 24/11/2023)

⁸² <https://uefiscdi.gov.ro/proiecte-de-cercetare-exploratorie-pce> The Information package is also available in English, under the following tab: Pachet de informații și proces depunere. (last accessed 24/11/2023)

procedure for submission, evaluation and selection of project proposals, eligibility standards for evaluators, etc. as well as templates for the application form and evaluation sheet.

- a. Each information package is elaborated according to the specificities of each funding instrument, in accordance with the requirements from the National Strategy for RDI and of the National Plan for RDI, as well as other relevant strategic and policy documents. Moreover, in some cases it can also draw inspiration from different practices at European and international levels.
2. The first draft of the information package is then verified and approved by the MCID.
3. Afterwards, the information package is made publicly available on our website and goes through a process of public consultation of 30 days, when all stakeholders from the RDI ecosystem can propose changes, additions etc. In addition, the members of the research community are also informed through our BrainMap platform and through our regular newsletters.
4. After the incorporation of proposed changes and adjustments, the document goes back to the MCID.
5. The call is officially launched together with all its corresponding materials (templates etc.) and calendar.

2.5.2. Scope of the pilot and cohort for the Action Plan at Pilot#4 UEFISCDI

The pilot programme at UEFISCDI is integrated into the National Research, Development and Innovation Funding Programme focused on "Centres of Excellence"⁷⁷. The call for project applications was initially scheduled between November 2023 and February 2024, with the selected projects planned to start between September-November 2024. However, due to decisions taken by the Ministry of Research, Innovation and Digitalisation, the calendar of the programme call has changed, the call was launched on 31 of January 2024 (on time), but the successful projects are expected to be announced in the first part of 2025, and might be contracted in April-May 2025. As a result, the second indicator (FAIR Data Management Plans Finalised [OPT]) will not be piloted during the OPUS piloting phase but in due time, aligned with the new calendar of the program call. The OPUS pilot will focus on the development of the FAIR DMPs (FAIR Data Management Plans Being Developed [PRO]) during the second pilot phase.

This programme aims to fund 20-24 projects, each comprising roughly 10 researchers. Consequently, the pilot group will consist of approximately 200-240 researchers, spanning various career stages. However, this is subject to the number of funded projects and the team sizes.

The pilots' designated timeframe is 5 years, with the possibility of a 2-year extension based on assessment. The call for applications, evaluation of applications, announcement of successful projects and possibly the contracting of the projects will be comprised in the OPUS pilot period of 18 months, however, **commencing in M1 of the pilot - January 2024.**

The evaluation process within the pilot programme **will primarily assess the collective performance of the researchers in the funded projects, considering specific indicators and interventions outlined for the pilot.** The evaluation will encompass the assessment of project applications and the appraisal of project performance relative to the selected indicators. The focus will be on evaluating the entire cohort for the purpose of the pilot programme and to inform future policies and priorities related to researcher assessment at UEFISCDI. The baseline and target criteria for the pilot programme are established based on the anticipated future activities of the cohort involved in the pilot projects.

2.5.3. Action Plan to implement the interventions per category at Pilot#4 UEFISCDI

UEFISCDI selected two indicators from the **research category** (subcategory of **data/"data planning"**). Please refer to the table 4.3.11 in Annex III for an overview of the full set of indicators and its targets. The pilot decided to promote the adoption of research data management (RDM) practices in line with FAIR principles as part of projects funded under Centres of Excellence funding program. For this, the funding

instrument information package⁸³ – which has undergone a process of public consultation (between August – September 2023) and was launched on 31 of January 2024 – includes two specific sections referring to RDM practices and the need for elaborating DMPs for each project funded under the respective call:

1. In the application form, section B3. In the 'Implementation' part of the project description applicants are asked to: Describe the practices for RDM used in the project in line with FAIR principles. Should the proposal be funded, a plan for data management (Data Management Plan - DMP) will be developed in the consortium within the first 6 months of implementation.
2. Correspondingly, evaluators assess applications under the Implementation criteria (representing 20% in the overall evaluation process), considering also the description provided for RDM practices: "the research data management is convincing in compliance with FAIR principles".⁸⁴
3. For the piloting and implementation of the two selected indicators (FAIR DMP being developed and FAIR DMP finalised), UEFISCDI have identified sixteen interventions. The following table describes the interventions and respective targets for each of the category to the level of detail possible at the time of writing.

The interventions defined and piloted will eventually lead to the actual implementation – at the institutional and national level - of both indicators selected in the specific funding instrument, even if the second indicator will be met after the OPUS pilot is over. Compared to the initial planning, certain delays appeared in activities and targets (due to the change in the calendar of the programme call); to respond to this, some activities have been re-planned, and new interventions have been defined for the timeframe of the pilot.

Some steps will be designed and developed by the time of the pilot implementation, and further steps will be dependent on the development of the former. In addition, some details regarding the interventions will need higher management approval, and possible changes at the institutional level might affect the RDI ecosystem overall: the platforms administrated by UEFISCDI function through protocols defined at top-level. Higher management decision-making is required for matters such as the implementation of a new field to collect information. In addition, new roles for the current staff also need higher management approval. Considering this scenario, the implementation details of the interventions at UEFISCDI will be discussed and will depend on further approval at the higher management level.

The following tables include the interventions that will be piloted. Note that even though some interventions have been deleted when compared to D4.1, the numbering of the interventions has not been altered so the table of changes (Table 4.2.4 in Annex II) can be read in combination with the action plan.

⁸³ Information Package for the "Centres of Excellence " 2023 call available at <https://uefiscdi.gov.ro/news-dezbatere-publica-pachet-informatii> (last accessed 24/11/2023)

⁷⁷ <https://uefiscdi.gov.ro/centre-de-excelenta-coex>

⁷⁸ Information Package for the "Centres of Excellence" 2023 call available at <https://uefiscdi.gov.ro/centre-de-excelenta-coex>

⁷⁹ Idem.

2.5.4 Interventions within the Research category

Table 2.10: Interventions within Data / Data Planning for UEFISCDI

| Data | | | | | |
|--|-------------|-----------|------------|--|--|
| Data planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1.1 Policy intervention: Seek approval to incorporate FAIR DMPs into the program call. | Achieved | - | - | OS and RA experts have prepared relevant documentation to serve as arguments for the need of implementing RDM practices into projects funded as part of different funding instruments managed by the Agency. This included information regarding the need for such practices, potential benefits, and existing good practices. The inclusion of RDM practices and FAIR DMPs was then discussed in the specific context of the Centres of Excellence funding programme together with the management of the institution, who agreed with the arguments provided. | Institution management (decision-making) OS & RA experts (part of the OPUS project) (responsible) Programme officers (implementing) |
| 1.2 Policy intervention: Include FAIR DMP provisions into the application form and evaluation criteria of the program call. | Achieved | - | - | OS and RA experts have prepared text provisions to be included in the application form and evaluation criteria of the Centres of Excellence funding instrument, which were afterwards discussed together with the management of the institution and the program officers. After 2 rounds of feedback, the respective provisions were incorporated into the information package for the funding call (as specified in the section 5.3.). | Institution management (decision-making) Programme officers (responsible & implementing) OS & RA experts (part of the OPUS project) (responsible & implementing) |
| 1.3 Policy intervention: Seek approval to incorporate FAIR DMPs into other existing institutional platforms (e.g. BrainMap, EERTIS). | - | - | Achieved | <p>Potential links between the EVOC platform (the institution's reporting/ monitoring platform of RDI projects and scientific progress) and certain modules in the BrainMap platform will be explored, such as the Research Outputs Registry and the Projects Registry.</p> <p>Specific sections would need to be created or updated within our institutional platforms - BrainMap platform and EERTIS platform (the online platform that facilitates access to research infrastructures, research and technology services). These might include sections to make DMPs openly available. This is subject to higher management approval.</p> | Institution management (decision-making) OS & RA experts (part of the OPUS project) (responsible) Members of the IT department (supporting) |

| Data | | | | | |
|---|-------------|-----------|------------|---|--|
| Data planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <p>The respective sections could host metadata about the produced DMPs, as well as links to databases referenced within the respective DMPs, and even publicly available DMPs, where this is the case.</p> <p>Estimated time interval: M14-M18 (February-June 2025)</p> | |
| 1.4. Policy intervention: Investigate other funding programmes and seek approval to incorporate FAIR DMPs into other program call(s). | - | - | Achieved | <p>OS and RA experts will investigate other calls/ funding programmes for which FAIR DMPs practices could be included and based on the investigation will make proposals to the team managing the programmes and the high management of UEFISCDI, who will further decide whether to include the new criteria in specific funding instrument(s).</p> | <p>Institution management (decision-making)</p> <p>Programme officers (supporting)</p> <p>OS & RA experts (part of the OPUS project) (responsible & implementing)</p> |
| 1.5. Policy intervention: Include FAIR DMP provisions into the application form and evaluation criteria of other program call(s), if the case (1.5 dependent on 1.4.) | - | - | Achieved | <p>If intervention 1.4. leads to approval of including FAIR DMPs into other funding call(s), OS and RA experts will prepare text provisions to be included in the application form and evaluation criteria of the respective funding instrument(s), which will afterwards be discussed with the management of the institution and the programme officers.</p> | <p>Institution management (decision-making)</p> <p>Program officers (supporting)</p> <p>OS & RA experts (part of the OPUS project) (responsible & implementing)</p> <p>Ministry of Research, Innovation, and Digitalisation (decision- making)</p> |
| 2.1 Resource Intervention: Provide a contact point on DMPs for researchers in the program call. | - | - | Achieved | <p>A contact point from the institution's staff will be identified and assigned to provide information regarding DMPs to applicants/ beneficiaries. This contact point will receive relevant information on the topic, and specific training, if necessary.</p> | <p>Institution management (decision-making)</p> <p>Programme officers (supporting)</p> <p>OS & RA experts (part of the OPUS project) (responsible & implementing)</p> |
| 2.2 Resource Intervention: | - | - | Achieved | <p>This action foresees programme officer(s) and IT supporting staff (responsible for the applications, reporting, and monitoring platforms) to integrate additional work</p> | <p>Programme officer(s) (implementing)</p> |

| Data | | | | | |
|---|-------------|-----------|------------|--|--|
| Data planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Integrate support for DMPs into the workload of staff*. | | | | to collect and monitor information related to DMPs. Details on this specific information to collect and monitor will be identified and approved by senior management. They will receive RDM-DMP specific basic information, as well as specific basic training if needed. These will be defined after a feasibility analysis will have to be done with regards to the platforms and the processes which will need to be updated; technical specifications and workflows will be defined (by the OS & RA experts together with the IT staff and programme officers). Any updates/ new features to the platforms will need approval from the institution's management. | IT supporting staff (implementing) OS & RA experts (part of the OPUS project) (supporting & implementing) |
| 2.3 Resource Intervention: Develop DMP template for researchers in the program call (# of templates). | - | - | 1 | For the researchers of the winning projects, a Data Management Plan (DMP) template will be developed to guide them (in Romanian and English); the template will be aligned and inspired by European recommendations and practices (e.g. Horizon Europe, Science Europe). As the calendar of the competition changed and allows additional time for this intervention, a new activity (sub-task) has been defined: the DMP template prepared – agreed version at the institutional level - will be tested with researchers in the RDI, OS Community, reaching the potential researchers involved in the programme call (March – April 2025) and adjusted according to their feedback. In M18, the final version of the template will be ready. | OS & RA experts (part of the OPUS project) (responsible) |
| 2.4 Resource Intervention: Provide good practice and examples on DMPs for researchers in the program call (# of guideline documents). | - | - | 1 | A document with guidelines will be developed (in Romanian and English) to support researchers of the awarded project researchers in the drafting of their DMP, offering information and links to resources available online and providing good practice and examples. This will be done in February - March 2025, prior to the consultation on DMP to also sustain the consultation, and will be disseminated prior to the start of the successful projects . | OS & RA experts (part of the OPUS project) (responsible) |
| 3.2 Repository Intervention: Develop DMP-related | - | - | Achieved | Information regarding RDM - DMP will be collected through UEFISCDI reporting/ monitoring platform. This may require developing new features or updating the reporting of outputs. Details on this specific information to be collected, as | IT supporting staff (implementing) Program officer(s) (implementing) |

| Data | | | | | |
|---|-------------|-----------|------------|---|---|
| Data planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| specifications into existing project reporting/monitoring platform. | | | | well as reporting/monitor needs will be identified and further approved by senior management. When collecting the DMPs, internal procedures and the reporting/ monitoring platform (EVoC) might need to be updated or new features might be planned to be able to collect the corresponding information. According to the information package, projects will have to report their DMP after 6 months of implementation, and although this step won't be captured in the OPUS pilot, the specifications for the EVoC platform will be ready by June 2025. The estimated time frame will be M16- M18. | OS & RA experts (part of the OPUS project) (supporting) |
| 3.3 Repository Intervention: Develop DMP-related specifications for the other existing institutional platforms (e.g., BrainMap and EERTIS). | - | - | Achieved | Depending on management approval and previous work with the evaluation/ reporting platform (EVoC), information on the DMPs (metadata, or full DMPs) could be integrated in the inter-connected communities (BrainMap and EERTIS) where members can show/ make open their research results. This would require technical updates/ developments, e.g. for sections to host metadata about the produced DMPs or the full DMPs (dependent on intervention 1.3). Estimated time frame will be M16-M18 (April – June 2025). | IT supporting staff (implementing) OS & RA experts (part of the OPUS project) (supporting) |
| 4.1 Awareness Intervention: Develop information package (incl. about DMPs) for researchers applying to the program call. | Achieved | - | - | Before the start of the call, an information package for the CoE funding instrument was developed and launched into public consultation (August-September 2023). On 31 of January 2024, the competition (the call for applications for projects) related to the pilot funding instrument "Centers of Excellence" was launched. OS and RA experts drafted specific OS and DMP provisions to be included in the call, along with corresponding arguments, raising awareness to the management. Specific DMP requirements were included in the application form and evaluation criteria along with general information and links to the additional information (and policies) supporting the requirements. Time frame: June-August 2023. | Institution management (decision-making) Programme officers (responsible, implementing) OS & RA experts (part of the OPUS project) (supporting) |
| 4.2 Awareness Intervention: Share information on external activities/events on Open Science (incl. about DMPs) | Ongoing | Ongoing | Achieved | The large RDI community in Romania (in BrainMap) will be invited to be part of the national OS community managed by the institution (UEFISCDI) where constant dissemination actions will be carried out on the importance of data sharing and open science throughout the OPUS pilot and beyond. Having an account in BrainMap is a conditionality for all researchers participating in UEFISCDI programme calls. Regular and dynamic updates, along with news on relevant events (national and | OS & RA experts (part of the OPUS project) (responsible, implementing) |

| Data | | | | | |
|--|-------------|-----------|------------|--|---|
| Data planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| with the RDI, OS Community (reaching the potential researchers in the program call)*. | | | | international) will be disseminated in the BrainMap community. Also, the community provides space for discussion on topics of interest (DMPs and RDM related topics will be opened in this space). Apart of this, other channels of dissemination include: the social media accounts of UEFISCDI and of the OS Knowledge Hub (OSKH – UEFISCDI) ⁸⁰ where constant updates and news are posted; and the national OS portal ⁸¹ administrated by the OSKH. Estimated time frame will be M1-M18 (January 2024 – June 2025). A larger dissemination action to support this was held in October 2023: where a first webinar of raising awareness was organised on the topic of FAIR data and RDM (DMPs), including other OS practices and the relevance for RA (over 200 participants). As a conclusion of the discussions and to support the future/ potential applicants to the CoE funding grants, we opened a topic on DMPs in the OS Community of the BrainMap platform where we started sharing relevant documents and updates. | |
| 4.5. Awareness Intervention: Organize a conference on Research Assessment and Open Science with the RDI, OS Community and researchers in the program call as well as European and international experts (# of events). | - | - | 1 | The event is planned for November 14th 2024 and will serve as a platform to share and explore innovative approaches, policies and use cases to research assessment considering open science practices in Romania and at international level. It aims to bring together leading academics, researchers, policymakers and professionals from all over Europe. The progress and challenges of the OPUS pilot will be discussed. Moreover, experts involved in OPUS will be involved (in organizing the event and show-casing the experiences with the pilots). The OPUS RAF and the pilot will be central subjects in the conference. The conference represents a significant awareness tool since it gathers a diverse RDI national and international community and it will be corroborated with activities pre - and post event, that would endorse and promote research assessment and open science outputs stemming from the conference. | OS & RA experts (part of the OPUS project) (responsible) Institution management (decision-making) OPUS experts (supporting, participants) |
| 5.1 Training Intervention: Run Hands-on working meetings (HOW) on DMPs | - | 1 | 2 | The staff of the UEFISCDI (programme officers, IT staff) will need guidance and basic training with regards to the new requirements introduced in the funding programme, for them to implement (technical) changes, to monitor the compliance and to offer support to the beneficiaries. At least one Hands-on meeting and regular discussions will happen before the funded projects start (M1-M9) and | IT supporting staff (supporting, participants) Program officer(s) (supporting, participants) |

| Data | | | | | |
|--|---|-----------|------------|---|--|
| Data planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| for support staff of the program call (#HOW). | | | | another Hands-on meeting after the successful projects have been announced (estimated M16-M18) . Beyond these, constant contact between OS, RA experts, Programme officer(s) and IT will have to be ensured. | OS & RA experts (part of the OPUS project) (responsible, implementing) |
| 5.2 Training Intervention: Run webinars on DMPs with the RDI, OS Community (reaching the potential researchers in the program call, # of trainings). | - | - | 1 | A training for the RDI, OS Community, reaching the potential researchers involved in the programme call will be organized in M17. The session will be focused on the DMP template (the final form after the consultation), the guiding documents and selected best practices and examples of DMPs, including information on how to open DMPs. | OS & RA experts (part of the OPUS project) (responsible) |
| Goals of the interventions | <p>The short-term goals (during the pilot) are:</p> <ul style="list-style-type: none"> To put into practice the mandatory provision of the National Strategy, regarding the elaboration of data management plans (DMPs), compliant with FAIR principles within the RDI projects financed with public funds. This provision is for the first time requested within any RDI funding programme. To encourage the uptake of OS practices. <p>The long-term goals (post-pilot) are:</p> <ul style="list-style-type: none"> To encourage data sharing and collaboration. By asking for DMPs, we aim to encourage researchers implementing funded projects to share their data with other researchers. This way, the latter can re-use the resulting data, build on it, and advance science and innovation. To increase the quality of research. Data well-managed can lead to increased research quality, as data becomes easier to find, access and re-use, this way making research findings more reproducible and reliable. | | | | |
| Risks and mitigations | <p>Risk: Institution management might not approve updates in the other institutional platforms due to their overall architecture and complexity (e.g. BrainMap, ERRIS) in the first round of projects who implement DMPs (during the pilot in OPUS).</p> <p>Mitigation: A first test of updates or a basic feasibility analysis for the potential implementations could be done during the OPUS pilot.</p> <p>Risk: Support staff could be overwhelmed by technical questions from researchers (and by the complexity of the subjects new to them).</p> <p>Mitigation: Institution's OS collaborators (experts in OPUS) will step-in with additional support.</p> <p>Risk: Institution management might not approve updates in the platforms or the technical changes/ updates might prove to be more complex/ require an additional effort which the IT support staff could not integrate into their current work.</p> <p>Mitigation: An analysis and plan (including and estimation of resources needed) will be drawn because of the OPUS pilot to be considered for future developments and links to other activities in support of data sharing and open science.</p> <p>Risk: Despite the raising awareness actions, researchers might be reluctant in sharing their outputs and DMPs as this is very new and not a usual practice at national level.</p> <p>Mitigation: Additional awareness raising events will be explored and carried (if possible) in conjunction with other complementary projects/ activities.</p> | | | | |

| Data | | | | | |
|-----------------|---|-----------|------------|-----------------------|-------------------------------|
| Data planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | <p>Risk: The activities are dependent on the dynamic political changes and/ or external factors (Government – Ministry changes/ decisions), which influence the funding instrument process (especially the calendar), thus there is a risk of further delays.</p> <p>Mitigation: Maintain regular communication with the policy body to stay updated regarding any changes and status or requirements that may impact the pilot timeline. Define new activities/ interventions to respond/ adapt to the changes, so that the scope of the pilot is met (and have effect - lead to implementation of new indicators from the OPUS RAF in the funding call(s) even after the project ends).</p> | | | | |

The **reward system** foreseen for researchers will be transversal for all the interventions, and it will be aimed specifically at the cohorts. UEFISCDI will provide certificates for the OS practices: the researchers in the pilot who will participate in the DMP related webinars and other events organized on this topic by UEFISCDI, will receive a certificate of participation (stating their role in promoting OS).

2.6. Information about Pilot#5 RCL

The Research Council of Lithuania (RCL)⁸⁵ is a science and studies policy implementing institution, which performs an expert and advisory function to the Seimas of the Republic of Lithuania and to the Government in matters of studies and experimental development.

RCL's mission is to actively participate in the formulation of research, experimental development and innovation policy and to strive to make Lithuania's system of research, experimental development and innovation effective and in line with the expectations of Lithuanian society and global challenges. RCL does so by applying organisational and financial instruments for competitive funding of scientific research. Its **strategic objectives** are to increase the value, efficiency and impact of science. This is achieved by developing activities along the following main axes: to make science funding more efficient; to develop Lithuania's scientific community and to implement the principles of OS. As part of Lithuania's science policy, RCL:

- Performs an expert function,
- Conducts scientific performance evaluations,
- Administers the most important programmes for the development of Lithuanian science,
- Represents Lithuania's interests in science and experimental development issues in working groups of the European Union member states and in many international organisations,
- Implements competitive funding for science programmes.

2.6.1 Open Science and Research Assessment at Pilot#5 RCL

The following sub-sections include different policies, practices and/or initiatives that exist or are planned within the institution regarding OS and research assessment.

2.6.1 i) Open Science policies, practices and initiatives at Pilot#5 RCL

In Lithuania, public and private institutions are required by law to make any research results public⁸⁶ and the RCL is the institution coordinating **OA activities** within the country^{87,88}.

The RCL collects and systematises the data on **OA databases** used in Lithuania, on legal, financial and other developmental aspects, participates in the OA policy development and encourages dissemination of the OA concept. Today, the following OA databases are available in Lithuania:

- National aggregated OA repository – the Lithuanian Academic Electronic Library (eLABa⁸⁹). A repository which includes e-documents, such as theses and dissertations. The installation of the repository and its development is the responsibility of the Lithuanian Research Library Consortium (LMBA) and the Lithuanian Research Library Informational Research and Study Infrastructure

⁸⁵ <https://www.lmt.lt/en/about-the-research-council/structure/775> (last accessed 15/11/2023)

⁸⁶ <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.343430/asr> (last accessed 15/11/2023)

⁸⁷ <https://www.lmt.lt/en/science-policy-implementation/open-science/open-access-in-lithuania/2935> (last accessed 11/11/2023)

⁸⁸ RCL's main documents governing **OS** are:

- Budapest OA Declaration/Initiative: <https://www.budapestopenaccessinitiative.org/> (last accessed 15/11/2023)
- Bethesda Statement on Open Access Publishing (2003): <https://www.budapestopenaccessinitiative.org/> (last accessed 15/11/2023)
- Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003): <https://openaccess.mpg.de/Berlin-Declaration> (last accessed 15/11/2023)
- UNESCO Recommendation on OS (2021) [chrome-extension://efaidnbmnnnibpcajpcqlclefindmkaj/https://www.unesco.org/en/rep/unesco-recommendation-on-open-science-2021](https://www.unesco.org/en/rep/unesco-recommendation-on-open-science-2021) (last accessed 15/11/2023)
- European Commission Recommendation on access to and preservation of scientific information (2018) [chrome-extension://efaidnbmnnnibpcajpcqlclefindmkaj/https://eur-lex.europa.eu/legal-content/LT/TXT/PDF/?uri=CELEX:32018H0790&from=SK](https://eur-lex.europa.eu/legal-content/LT/TXT/PDF/?uri=CELEX:32018H0790&from=SK) (last accessed 15/11/2023)
- Creative Commons (CC) licences <https://creativecommons.org/share-your-work/> (last accessed 15/11/2023)

⁸⁹ https://www.lvb.lt/primo-explore/search?vid=ELABA&lang=en_US&fromRedirectFilter=true (last accessed 15/11/2023)

Maintenance and Development Consortium (LABIIMSPPK). The data stored in the eLABa becomes accessible in international aggregated databases: DART-Europe⁹⁰, DRIVER⁹¹, NDLTD⁹² and others;

- Inter-institutional research publication and research data archives: The Lithuanian humanities and social sciences research data archive (LiDA)⁹³, the full-text database Lituanistika⁹⁴, the National Open Access Research Data Archive (MIDAS)⁹⁵;
- Institutional research databases: The Registry of Open Access Repositories Mandatory Archiving Policies (ROARMAP)⁹⁶ refers to the 3 institutional repositories in Lithuania: the Lithuanian University of Health Sciences, Vytautas Magnus University and Mykolas Romeris University open access databases.

Currently, there is a shortage of data specialists on FAIR principles in Lithuania. In response to the provisions regarding OA of the EU Framework Programme for Research and Innovation, RCL drew up the Guidelines on Open Access to Scientific Publications and Research Data Management, which contain provisions on the **management of data and FAIR principles**. At the time of writing, new guidelines are being developed in the framework of EOSC at national level (with a budget of 10 million euros).

With regards to **research software**, it is common practice amongst Lithuanian researchers to use the MIDAS archive. Zenodo and DataCite are the most used international archives.

RCL **supports citizen science** through its involvement in projects (Pro-Etics⁹⁷, IANUS⁹⁸). The Lithuanian Council further **supports OS** more generally by paying the APCs for publications via a special competitive program called "Support for publishing of science and research". Besides, APCs can be included in project proposals as eligible expenses.

In terms of **OS training practices**, RCL does not offer training, apart from information seminars organised by the National Contact Points (NCPs) of the Horizon Europe Programme. In addition to this seminars, specialised training on OS and scientific data management is regularly offered only Kaunas University of Technology (KTU) and Vilnius University (VU).

Researchers are involved in shaping policies /practices for OS through its participation in the development of the guidelines for applications and policies on OS.

Lastly, the Lithuanian research and higher education institutions participate in international projects and initiatives on OA, namely on OpenAIRE⁹⁹ and OpenAIRE plus¹⁰⁰ and RRING¹⁰¹.

2.6.1 ii) Research Assessment policies and practices at Pilot#5 RCL

RCL does not assess researchers as individuals. The assessment is done at the university, research institute and college level through the Annual Assessment of R&D activities. The quantitative assessment is carried out annually by national experts. Metrics are used but never at the researchers' level. There are no indicators/aspects related with OS included the current assessment system.

However, RCL encourages Lithuanian research and study institutions, research infrastructures and related organizations to adopt their own policies on OS to scientific results and descriptions of procedures for the management of scientific data.

⁹⁰ <https://www.dart-europe.org/basic-search.php> (last accessed 15/11/2023)

⁹¹ <https://www.driverdb.com/> (last accessed 15/11/2023)

⁹² <https://ndltd.org/> (last accessed 15/11/2023)

⁹³ <https://lida.dataverse.lt/> (last accessed 15/11/2023)

⁹⁴ <https://www.lituanistika.lt/en> (last accessed 15/11/2023)

⁹⁵ <https://biblioteka.vu.lt/en/science/research-data-and-research-data-management/national-open-access-research-data-archive-midas> (last accessed 15/11/2023)

⁹⁶ <https://roarmap.eprints.org/> (last accessed 15/11/2023)

⁹⁷ <https://pro-ethics.eu/#0> (last accessed 15/11/2023)

⁹⁸ <https://trustinscience.eu/about/> (last accessed 15/11/2023)

⁹⁹ <https://www.openaire.eu/> (last accessed 15/11/2023)

¹⁰⁰ <https://www.openaire.eu/openaireplus-project> (last accessed 15/11/2023)

¹⁰¹ <https://rring.eu/> (last accessed 15/11/2023)

2.6.2 Scope of the pilot and cohort for the Action Plan at Pilot#5 RCL

The RCL pilot will be integrated into the National Funding Programme for “Independent Scientific Research Groups of Scientists”. **The call for project applications encountered delays and began later than originally scheduled, starting in April 2024 instead of the planned November 2023.** Contracts with researchers were signed in the summer of 2024, and projects officially commenced in September 2024, being too recent for the pilot. Consequently, an earlier call within the same programme (in 2023), was selected. During this chosen 2023-year call, 132 projects received funding, each involving 3 to 5 researchers.

The initial phase of the RCL pilot (M1-M9) faced difficulties due to the delayed start of researchers' projects and personnel changes (with two trained members leaving the OPUS team), resulting in significant challenges. Insights gained from these experiences have led to the formation of an Advisory Board for the project. The OPUS Advisory Board (AB) will be composed of RCL staff members with expertise in open science, tasked with monitoring and addressing open science queries across the Research, Education, and Valorisation categories. Their primary role is to provide guidance to the project manager on matters related to OS, ethics, and data management throughout the OPUS pilot. The board will collaborate on various initiatives, such as designing a Data Management Plan template and discussing potential funding sources for OS publishing. This relationship is advisory, with the board supporting the project manager in ensuring the successful implementation of OS practices. This AB will be operational throughout the OPUS pilot.

In the second phase, RCL will use 124 projects out of 132 mentioned above. Of these, 45 have shown interest in the pilot, and 23 projects have agreed to onboard, each comprising 3 to 5 researchers. This phase will last nine months, commencing on October 1, 2024, and concluding at the end of June 2025, with a focus on Principal Investigators and project levels.

The RCL working plan has been revised and adjusted to be more realistic and achievable for the second pilot phase, which will be closely monitored. Evaluation within the pilot will concentrate on the collective performance of the cohort involved in funded projects, measuring selected indicators and interventions. Instead of individual evaluations, researchers in the pilot will be assessed as a group. Importantly, this marks the first inclusion of Open Science (OS) in the funding programme. The pilot's benchmarks and objectives are based on existing statistics from previously funded projects and anticipated future activities within the researcher cohort.

Further engagement from the research community is expected through OPUS. The selected cohort will be invited to participate in a survey aimed at evaluating the interventions. This survey will enable an analysis of the awareness and development of OS competencies within the researcher community (refer to table 2.9 below for additional details).

2.6.3 Action Plan to implement the interventions per category at Pilot#5 RCL

The categories and subcategories chosen for the pilot encompass a holistic approach to integrate OS practices within RCL research funding programs. RCL has selected three OS indicators from the research category: subcategories of **data planning (“Developing (FAIR) Data Management Plans Openly Available”)** and **publication drafting (“Published Publications Openly Available”)**. Managing data effectively and promoting transparent publication practices align with the core tenets of OS, fostering reproducibility and collaboration.

By **OA to scientific publications**, RCL considers the submission of these into repositories and/or OS journals. All scientific publications from projects must be cached and archived. Digital copies of publications must be submitted to the repository immediately after acceptance for publication. The publication metadata should be fully open, searchable, and automatically retrievable, even when a scientific publication is embargoed. When scientific publications are published, the repositories must contain links to the officially published versions. Project research publications in the absence of an embargo period, must be opened immediately after submission to the repository. Article processing charges (APCs), book processing charges (BPCs) and costs incurred in publishing in OS journals and books may be covered by projects funded by the RCL and are foreseen in the project. Costs for opening publications in hybrid journals are not covered by RCL projects. All books and articles published in OS journals for which article and/or book preparation fees have been paid must be published under a Creative Commons license CC BY (Creative Commons, CC BY).

With regards to **DMPs**, the projects for which data is collected shall submit a DMP in their application, which may be revised during the project⁹⁶. Costs incurred for the implementation of the data management plan during the project period shall be foreseen in the project and may be covered by RCL.

RCL has also selected two OS indicators from the **education category** for the subcategory of **skills** ("**Open Science Skills Certificates obtained**") and **courses** (on "**course development**"). Investing in course development supports the education and dissemination of OS principles. The funded principal investigators will receive the Open Science course that will cover topics that are important to cohort researchers, e.g. Rights Retention, Creative Commons licensing, sharing open data, and success stories from researchers who have benefited from open access; using various tools and repositories (e.g., Zenodo, GitHub, PURE) for research data management, publications, and software sharing. By promoting the development of targeted courses, RCL contributes to the skills enhancement of researchers, promoting the understanding and adoption of OS practices.

RCL has lastly selected one OS indicator from the **valorisation category** in the subcategory of communication (on "**public speaking**"). Through the selected interventions, RCL intends to increase the appearances given on OS. Emphasising communication and public speaking skills in the valorisation category enhances the visibility and impact of OS practices. Researchers proficient in effectively communicating the principles of OS contribute to broader awareness and engagement within and beyond the research community.

The interventions included in the next section will contribute to the achievement of the targets of the indicators. Please refer to the tables 4.1.12 to 4.1.16 in Annex I for an overview of the full set of indicators and its targets. The interventions will serve to support the implementation of the indicators.

The end goal is to inspire a culture of OS within RCL, where transparent, collaborative, and accessible research practices are not only recognised but also actively valued and integrated into the standard procedures of the research funding programmes. This cultural shift aims to contribute to the broader movement towards more open, collaborative, and impactful research practices in the scientific community.

2.6.4. Interventions within the Research category

Table 2.11: Interventions within Data for RCL

| Data | | | | | |
|---|-------------|-----------|------------|---|---|
| Data Planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1. Policy Intervention: Obtain senior management approval for making DMPs openly available. | - | - | Achieved | This approval process will include: <ol style="list-style-type: none"> 1. Decision taken by Executive Chair to make DMPs openly available 2. Cohort Discussions (Month 10): Engage researchers and staff to discuss the DMPs, focusing on those willing to open their plans. Identify necessary conditions for compliance. 3. Template Discussion (Month 12) with researchers: During the monthly cohort meeting, a discussion will be had with researchers to define and co-create the DMP template. The information will be prepared by Advisory board. 4. Final Approval (Month 13): Obtain approval from the Executive Chair of the Research Council of Lithuania on the finalised template and the process for publishing DMPs on the RCL website. | OPUS project cohort Executive Chair (gives the approval on the template and on the publishing process) |
| 2. Resource Intervention: Establishment of the OPUS Advisory Board responsible for monitoring, assisting and advising on any open science or ethical queries that may arise in the pilot. | - | - | Achieved | <p>This intervention is transversal to all categories: Research, Education and Valorisation (the actions in bold are relevant to this intervention).</p> <p>The advisory board will be advising the project manager (responsible for the overall implementation of the pilot) on matters related to open science, ethics and data management. This group will consist of RCL staff members and will be operational throughout the OPUS pilot.</p> <ol style="list-style-type: none"> 1. Advisory Board Establishment (Month 10): RCL will establish an advisory board for the OPUS project to provide guidance on the Open Science queries that may arise. This group will consist of RCL staff members with expertise in the open science topic. This Advisory Board will support all interventions. 2. Template Design for DMPs (Month 11): The advisory board will agree on the design and structure of the online DMP template for sharing on the website. | OPUS project manager OPUS advisory board |

| Data | | | | | |
|--|-------------|-----------|------------|---|---|
| Data Planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <ol style="list-style-type: none"> Advisory board will discuss and suggest some possible funding sources for open access publishing (Month 13-16). See intervention: Research/Publications (Table 2.12). Advisory Board Discussion (Month 15): Engage RCL OPUS advisory board members to discuss the the template for OS certificates for researchers trained by PIs that received RCL certificates for trainers. See intervention table of Education/Skills (Table 2.13) Advisory Board Discussion (Month 15): Engage RCL OPUS advisory board members to discuss the creating of OS ambassadors network, the roles, duties and rewarding system. See intervention: Education/ Courses (Table 2.14). Advisory board will discuss and suggest the process of the publishing open talks publicly available on the RCL website (Month 13-16). See Valorisation/Communication (Table 2.15). | |
| 3. Repository Intervention: Ensure there is an appropriate repository to share DMPs as a “good practice” example repository”. | - | - | Achieved | <p>The DMPs’ good practise repository will be integrated into the RCL’s website (https://lmt.lrv.lt/lt/veiklos-sritys/mokslo-politika/atvirasis-mokslas/).</p> <p>The OS part is currently undergoing modernisation following its migration to the governmental server and new content is being created.</p> <p>The repository is scheduled to be launched by March to May (M16-17) of next year, providing time for researchers to familiarise themselves with the resources before major project deadlines.</p> <p>The repository will store the DMPs as “good practice examples” that other researchers can draw upon as they develop their own.</p> | OPUS project manager IT RCL staff |
| 4. Awareness raising: Ensure researchers are informed and supported in all the steps towards making their DMPs openly available (# of webinars). | - | - | 1 | <p>During the monthly cohort meetings, the OPUS project manager will engage researchers in discussions about the key components of their DMPs that should be made public. Gather feedback on potential concerns and needs regarding transparency and data sharing. The AB will be invited to participate (Month 10-11); Webinar Organisation (Month 11-12):</p> <p>RCL will host a webinar dedicated to DMPs. The session will cover:</p> <ul style="list-style-type: none"> An introduction to DMPs and their importance. Presentation of the developed template for DMPs. Detailed guidance on how to complete the template and submit it to the website's repository. | OPUS project manager Opus cohort Lecturer for DMPs webinar |

| Data | | | | | |
|--|----------------|--------------|---------------|---|--|
| Data Planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 5.Training: Ensure there are best practice examples of data management plans that researchers can access in OPEN SCIENCE course (# of courses) | - | - | 1 | <p>This intervention is transversal to categories Research (Data Publications) and Education/Skills</p> <p>Train researchers (trainers) on the open science course topics. This will educate researchers (trainers) on how open access can enhance their individual academic profiles and contribute positively to the institution's reputation and researcher assessment metrics, etc.</p> <p>1. The topics of the OPEN SCIENCE course will be developed together with the researchers' from the cohort and the advisory board. Firstly, in M11-12, needs will be explored. Cohort Discussions (Month 11-12): During monthly cohort meetings, the project manager will engage in discussions with PIs and their researchers about the key components of the OPEN SCIENCE Course (see next table on skills) that will be organized for them. One of the key components of this course will be OA publishing. PIs will gather feedback on potential concerns and needs regarding OA. The advisory board will approve these topics. This course may cover topics such as Rights Retention, Creative Commons licensing, sharing open data, and success stories from researchers who have benefited from open access, using various tools and repositories (e.g., Zenodo, GitHub, PURE) for research data management, publications, and software sharing. These sessions will tailor content to different academic disciplines and sectors. They will definitely include data management plans, published publications and open science certificates as part of the pilot.</p> <p>2. In M12-13 the project manager will contact external experts on open science to develop the programme (including the date for the training), the course materials and deliver the course.</p> <p>3. RCL will host the OS training for PIs of the cohort in M13-15 and will organise all the logistics required to support it.</p> <p>4. After the course PIs will receive the certificate of OS trainers (see next table on skills).</p> | OPUS project manager Opus cohort Opus advisory board RCL communication team RCL procurement and financial team External experts |

| Data | | | | | |
|---|---|--------------|---------------|-----------------------|----------------------------------|
| Data Planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Goals of the interventions These interventions aim to enhance data management practices, promote transparency in research, and uphold ethical standards across various research fields. | Policy Intervention: Approval on Data Management Plans (DMPs) Why: Securing senior management approval for data management plans is crucial for establishing institutional support for open science practices. This step legitimizes the effort and encourages researchers to engage with these plans actively. Short-term Goals: <ul style="list-style-type: none"> Facilitate discussions among researchers to identify their willingness and any necessary conditions for compliance with open data practices. Refine the DMP template through collaborative input from researchers. Long-term Goals: <ul style="list-style-type: none"> Institutionalise the practice of making DMPs publicly available, fostering a culture of transparency and accountability in research. Ensure ongoing compliance and adaptation of DMPs to evolving standards in open science. | | | | |
| | Resource Intervention: Establishment of an OPUS Advisory Board Why: An advisory board provides essential oversight and guidance, addressing ethical concerns and ensuring best practices in data management. Short-term Goals: <ul style="list-style-type: none"> Form a knowledgeable Advisory Board that can assist researchers in navigating ethical queries related to data sharing. Develop a standardised DMP template that meets both institutional and ethical standards. Long-term Goals: <ul style="list-style-type: none"> Create a sustainable support structure for researchers, promoting continuous improvement in DMP practices. Establish a repository of best practices and ethical guidelines that can be referenced by future researchers. | | | | |
| | Repository: Creation of a DMPs Repository Why: A dedicated repository for DMPs serves as a centralised resource, enhancing accessibility and encouraging researchers to utilise these plans. Short-term Goals: Integrate the repository into the existing RCL website to ensure visibility and accessibility for researchers. Long-term Goals: Promote a culture of open science by making DMPs easily accessible, thus facilitating knowledge sharing and collaboration among researchers. | | | | |
| | Awareness Raising: Educating Researchers on DMPs Why: Awareness is key to engagement; researchers need to understand the benefits and processes associated with making their DMPs public. Short-term Goals: <ul style="list-style-type: none"> Conduct cohort discussions to gather insights and address concerns regarding the transparency of DMPs. Organize a webinar to provide comprehensive training on DMPs, including the importance of openness and guidance on the submission process. Long-term Goals: <ul style="list-style-type: none"> Foster a community of researchers who are well-informed and proactive about sharing their DMPs, leading to greater transparency in research practices. Establish a norm where sharing DMPs is viewed as a best practice, enhancing the reputation of the institution in the open science landscape. | | | | |

| Data | | | | | |
|-----------------------|----------------|--------------|---------------|---|----------------------------------|
| Data Planning | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | Training: Providing Best Practice Examples Why: Training is essential for empowering researchers with the skills and knowledge necessary to develop effective DMPs. Short-term Goals: Incorporate in-depth training on DMPs into the Open Science Course, ensuring that researchers have access to best practice examples. Long-term Goals: Create a well-trained cohort of researchers who are adept at developing and sharing DMPs, ultimately contributing to a robust open science framework. | |
| Risks and mitigations | | | | Policy Intervention: Approval on Data Management Plans (DMPs): <ul style="list-style-type: none"> Risk: Resistance from senior management or researchers regarding the approval of data management plans (DMPs) for open access. Mitigation: Engage in proactive cohort discussions to address concerns, clarify the importance of DMPs, and gather feedback to ensure all voices are heard before finalising the approval process. Resource Intervention: Establishment of an OPUS Advisory Board <ul style="list-style-type: none"> Risk: The Advisory Board may lack diverse representation or expertise, leading to inadequate guidance on ethical queries. Mitigation: Ensure the Advisory Board is composed of a diverse group of experts in ethics and data management, and actively seek input from various stakeholders to enrich discussions. Repository: Creation of a Data Management Plans Repository <ul style="list-style-type: none"> Risk: Delays in the integration and launch of the repository could hinder researchers' ability to access DMPs. Mitigation: Set a clear timeline for repository development with regular updates and check-ins to ensure milestones are met, allowing researchers to familiarize themselves with the system in advance. Awareness Raising: Educating Researchers on DMPs <ul style="list-style-type: none"> Risk: Low awareness or engagement from researchers regarding the importance of DMPs and the available resources. Mitigation: Conduct targeted outreach through cohort discussions and webinars, emphasizing the benefits of DMPs and providing clear, accessible information on how to utilise the resources effectively. Training: Providing Best Practice Examples <ul style="list-style-type: none"> Risk: Insufficient training materials or examples may leave researchers unprepared to create effective DMPs. Mitigation: Develop comprehensive training resources, including best practice examples, and continuously update them based on feedback from participants of the Open Science course. | |

2.6.5. Interventions within the Research category

Table 2.12: *Interventions within Publications for RCL*

| Publications | | | | | |
|---|-------------|-----------|------------|--|---|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1. Policy intervention: Seek senior management approval from each of the institutions of the researchers to fund OA publications. | - | - | Achieved | <p>This action involves obtaining senior management approval from each research institution. This will take place during monthly cohort meetings to secure funding for open access publishing (M10-11). All Principal Investigators (PIs) are expected to obtain this approval from their institutions between months 10 and 15 to facilitate the initiative.</p> <p>During the pilot phase RCL will explore opportunities to establish a funding program for this purpose from months 10 to 18.</p> | <p>OPUS project manager</p> <p>OPUS advisory board and RCL Executive Chair (will explore opportunities to establish a funding programme)</p> <p>Opus cohort PIs and their institutions' senior management</p> |

| Publications | | | | | |
|---|-------------|-----------|------------|---|---|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 2. Resource intervention: Establishment of the OPUS Advisory Board responsible for monitoring, assisting and advising on any open science or ethical queries that may arise in the pilot. | - | - | Achieved | <p>This intervention is transversal to all categories: Research, Education and Valorisation (relevant action within this intervention appear in bold).</p> <p>The Advisory Board will be advising the project manager (responsible for the overall implementation of the pilot) on matters related to open science, ethics and data management. This group will consist of RCL staff members and will be operational throughout the OPUS pilot.</p> <ol style="list-style-type: none"> 1. Advisory Board Establishment (Month 10): RCL will establish an advisory board for the OPUS project to provide guidance on the Open Science queries that may arise. This group will consist of RCL staff members with expertise in open science topic. This Advisory Board will support all interventions. 2. Template Design for DMPs (Month 11): The advisory board will agree on the design and structure of the online DMP template for sharing on the website. 3. Advisory board will discuss and suggest some possible funding sources for open access publishing (Month 13-16). See intervention: Research/Publications (Table 2.12). 4. Advisory Board Discussion (Month 15): Engage RCL OPUS advisory board members to discuss the the template for OS certificates for researchers trained by PIs that received RCL certificates for trainers. See intervention table of Education/Skills (Table 2.13) 5. Advisory Board Discussion (Month 15): Engage RCL OPUS advisory board members to discuss the creating of OS ambassadors network, the roles, duties and rewarding system. See intervention: Education/ Courses (Table 2.14). 6. Advisory board will discuss and suggest the process of the publishing open talks publicly available on the RCL website (Month 13-16). See Valorisation/Communication (Table 2.15). | OPUS project manager OPUS Advisory Board |
| 3. Repository Intervention: Ensure there is an appropriate | - | - | Achieved | Each PI will select an appropriate repository based on what is most appropriate to their academic needs. This may be institutional/national and international. This will be discussed with the OPUS project manager who will assist with any issues. The repository must meet the criteria outlined in section 2.6.3. | OPUS project manager |

| Publications | | | | | |
|--|-------------|-----------|------------|--|--|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| repository to share open access journals. | | | | | OPUS cohort |
| 4. Awareness raising: Ensure researchers know the benefits of OS and are aware of the training on the OPEN SCIENCE Course (# of communications). | - | - | 3 | <p>This intervention is transversal to categories of Research/ Publications, and Education/Skills/Courses.</p> <p>Once the contents have been defined for the OPEN SCIENCE course the project manager will develop a clear overview of the course and its contents which will include publications openly available (as part of the pilot) and other relevant topics. This communication will also include logistics and how to access the courses.</p> <p>The project manager then selects the communication channels for informing the OPUS cohort about the OPEN Science course (see next intervention). Three communications will take place either through Teams calls or through email updates.</p> | <p>OPUS project manager</p> <p>OPUS cohort</p> <p>PIs' teams</p> |
| 5. Training: 'Train the trainers' (PIs in the cohort) in OPEN SCIENCE topics/aspects (# of trainings). | - | - | 1 | <p>This intervention is transversal to the categories of Research (Data/Publications) and Education/Skills.</p> <p>Train researchers (trainers) on the open science course topics. This will educate researchers (trainers) on how open access can enhance their individual academic profiles and contribute positively to the institution's reputation and researcher assessment metrics, etc.</p> <p>1. The topics of the OPEN SCIENCE course will be developed together with the researchers from the cohort and the advisory board. Firstly, in M11-12, needs will be explored. Cohort Discussions (Month 11-12): During monthly cohort meetings, the project manager will engage in discussions with PIs and their researchers about the key components of the OPEN SCIENCE Course (see next table on skills) that will be organized for them. One of the key components of this course will be OA publishing. PIs will gather feedback on potential concerns and needs regarding OA. The advisory board will approve these topics. This course may cover topics such as Rights Retention, Creative Commons licensing, sharing open data, and success</p> | <p>OPUS project manager</p> <p>OPUS cohort</p> <p>Advisory Board</p> |

| Publications | | | | | |
|----------------------------|---|-----------|------------|--|-------------------------------|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <p>stories from researchers who have benefited from open access, using various tools and repositories (e.g., Zenodo, GitHub, PURE) for research data management, publications, and software sharing. These sessions will tailor content to different academic disciplines and sectors. They will definitely include data management plans, published publications and open science certificates as part of the pilot.</p> <p>2. In M12-13 the project manager will contact external experts on open science to develop the programme (including the date for the training), the course materials and deliver the course.</p> <p>3. RCL will host the OS training for PIs of the cohort in M13-15 and will organise all the logistics required to support it.</p> <p>4. After the course PIs will receive the certificate of OS trainers (see next table on skills).</p> | |
| Goals of the interventions | <p>Policy Intervention: Gain approval from Senior Management for establishing the OS ambassador's network Why: Gaining approval from senior management is crucial for legitimizing the OS ambassador's network, ensuring institutional support for promoting open science practices. This endorsement fosters a culture of transparency, collaboration, and accessibility in research. Short-term Goals:</p> <ul style="list-style-type: none"> Engage researchers to clarify the expectations and support needed from the OS ambassadors, ensuring their integration into the research community. Collaborate with the Advisory Board to strategize the network's structure and roles, building a solid foundation for the initiative. <p>Long-term Goals:</p> <ul style="list-style-type: none"> Establish a sustainable OS ambassador network that continuously advocates for open science practices, fostering an enduring culture of transparency and collaboration within research organisations. Ensure the network evolves to address emerging challenges and opportunities in open science, thereby promoting ongoing engagement and commitment among researchers. <p>Resource Intervention: Establishment of OPUS Advisory Board Why: Creating an advisory board dedicated to open science queries ensures that researchers have access to expert guidance and support, facilitating effective implementation of open science practices across the organization. Short-term Goals:</p> <ul style="list-style-type: none"> Form a team of experts to monitor and address open science queries, ensuring researchers have the necessary resources and guidance. Explore avenues for supporting open access publishing, ensuring that financial barriers do not hinder researchers' participation in open science. | | | | |

| Publications | | | | | |
|----------------------|---|--------------|---------------|-----------------------|----------------------------------|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | <p>Long-term Goals:</p> <ul style="list-style-type: none"> Develop a robust framework for ongoing support and communication regarding open science issues, ensuring that researchers can navigate challenges effectively. Foster a culture of continuous improvement in open science practices, with the advisory board evolving to meet the changing needs of the research community. <p>Repository Intervention: Sharing Open Science Access Journals Why: Ensuring that publicly funded research is readily available in appropriate repositories is essential for enhancing visibility and accessibility, aligning with the updated RCL Open Science guidelines. Short-term Goals:</p> <ul style="list-style-type: none"> Modernise the repository on the RCL website, ensuring it meets current standards and is user-friendly for researchers. Assess the effectiveness of existing Lithuanian repositories to identify areas for improvement. <p>Long-term Goals: Foster a culture of open access publishing, leading to increased visibility of research outputs and enhanced collaboration within the scientific community.</p> <p>Awareness Raising: Benefits of Open Access Why: Raising awareness among researchers about the benefits of open access is critical for encouraging participation in open science initiatives and enhancing the overall impact of research. Short-term Goals:</p> <ul style="list-style-type: none"> Facilitate discussions to gather feedback on researchers' perceptions and concerns regarding open access, ensuring the training addresses their needs. Develop and implement tailored training programs to educate researchers about the benefits of open access for their academic profiles and institutional reputation. <p>Long-term Goals: Create a community of informed researchers who actively advocate for open access practices, contributing to a broader movement towards transparency and collaboration in research.</p> <p>Training: Train the Trainers in Open Science Why: Providing training for Principal Investigators (PIs) ensures that knowledge of open science practices is disseminated throughout the institution, empowering researchers to adopt these practices effectively. Short-term Goals:</p> <ul style="list-style-type: none"> Identify specific training needs through collaboration with researchers and the advisory board, ensuring the course content is relevant and impactful. Develop a comprehensive training programme that addresses essential open science topics tailored to various disciplines. <p>Long-term Goals:</p> <ul style="list-style-type: none"> Institutionalize the training programme as a core component of professional development, fostering an ongoing culture of open science within the organization. | | | | |

| Publications | | | | | |
|-----------------------|-------------|-----------|------------|---|-------------------------------|
| Publication Drafting | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <ul style="list-style-type: none"> Create a network of well-trained trainers who can perpetuate the principles of open science, ensuring that knowledge continues to be shared and expanded within the research community. | |
| Risks and mitigations | | | | <p>Policy Intervention: Gain Approval from Senior Management for Establishing the OS Ambassador's Network</p> <ul style="list-style-type: none"> Risk: Potential resistance or lack of interest from senior management in endorsing the OS ambassador network. Mitigation: Present data and case studies that demonstrate the benefits of open science practices, highlighting how their endorsement can enhance institutional reputation and collaboration. <p>Resource Intervention: Establishment of OPUS Advisory Board</p> <ul style="list-style-type: none"> Risk: Difficulty in recruiting qualified experts for the advisory board, leading to insufficient guidance for researchers. Mitigation: Leverage existing networks and professional organisations to identify and invite recognised experts, ensuring a diverse and knowledgeable board that can effectively support open science initiatives. <p>Repository Intervention: Sharing Open Science Access Journals</p> <ul style="list-style-type: none"> Risk: Researchers may be reluctant to publish in open access journals due to concerns about quality or prestige. Mitigation: Provide evidence of the impact and quality of reputable open access journals, along with success stories from peers who have benefited from open access publishing. <p>Awareness Raising: Benefits of Open Access</p> <ul style="list-style-type: none"> Risk: Low engagement from researchers in discussions and training sessions about open access benefits. Mitigation: Utilize incentives such as recognition or rewards for participation and ensure discussions are framed around their specific concerns and interests, making the sessions relevant and engaging. <p>Training: Train the Trainers in Open Science</p> <ul style="list-style-type: none"> Risk: Resistance from Principal Investigators (PIs) regarding the necessity or relevance of the training program. Mitigation: Conduct preliminary surveys to identify training needs and demonstrate how the training will directly address those needs, thereby increasing buy-in from PIs and ensuring alignment with their research objectives. | |

2.6.6. Interventions within Education category

Table 2.13: Interventions within Skills for RCL

| Skills | | | | | |
|--|-------------|-----------|------------|---|--|
| Skills Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1.Policy Intervention: Obtain senior management approval on the “train the trainers” course and on providing OS certificates. | - | - | Achieved | <p>The training for trainers is being designed in this intervention to equip the cohort PIs with the necessary skills and knowledge on OPEN SCIENCE to effectively educate researchers, thereby enhancing the overall quality and impact of the using open science practices within the research performing organisations.</p> <p>This approval process will include:</p> <ol style="list-style-type: none"> 1. Cohort Discussions (Month 11): Engage researchers and staff to discuss the key aspects that they would like to learn more about or deepen their knowledge on. 2. Advisory Board Discussion (Month 12): Engage RCL OPUS Advisory Board members to discuss the questions of Open Science that can be included into the agenda of the Open Science Course. 3. Final Approval (Month 13): Obtain approval from the Executive Chair of the Research Council of Lithuania on the training the trainers course and agenda, as well as on the template of OS certificates (see the below intervention on resource). | OPUS project manager OPUS cohort RCL Executive Chair |
| 2.Resource intervention: Establishment of the OPUS Advisory Board responsible for monitoring, assisting and advising on any open science or ethical queries that may arise in the pilot. | - | - | Achieved | <p>This intervention is transversal to all categories (relevant actions for this intervention appear in bold).</p> <p>The Advisory Board will be advising the project manager (responsible for the overall implementation of the pilot) on matters related to open science, ethics and data management. This group will consist of RCL staff members and will be operational throughout the OPUS pilot.</p> <ol style="list-style-type: none"> 1. Advisory Board Establishment (Month 10): RCL will establish an advisory board for the OPUS project to provide guidance on the Open Science queries that may arise. This group will consist of RCL staff members with expertise in open science topic. This Advisory Board will support all interventions. 2. Template Design for DMPs (Month 11): The advisory board will agree on the design and structure of the online DMP template for sharing on the website. | OPUS project manager OPUS advisory board |

| Skills | | | | | |
|--|-------------|-----------|------------|---|---|
| Skills Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <p>3. Advisory board will discuss and suggest some possible funding sources for open access publishing (Month 13-16). See intervention: Research/Publications (Table 2.12).</p> <p>4. Advisory Board Discussion (Month 15): Engage RCL OPUS advisory board members to discuss the the template for OS certificates for researchers trained by PIs that received RCL certificates for trainers. See intervention table of Education/Skills (Table 2.13)</p> <p>5. Advisory Board Discussion (Month 15): Engage RCL OPUS advisory board members to discuss the creating of OS ambassadors network, the roles, duties and rewarding system. See intervention: Education/ Courses (Table 2.14).</p> <p>6. Advisory board will discuss and suggest the process of the publishing open talks publicly available on the RCL website (Month 13-16). See Valorisation/Communication (Table 2.15).</p> | |
| 3.Repository Intervention: Ensure there is an appropriate repository to share open science course materials for trainers. | - | - | Achieved | The internal repository for the Open Science course materials and skills certificates obtained will be created and stored on the internal Microsoft teams platform. It will be accessible only to the OPUS project cohort and Advisory Board members. | OPUS project manager OPUS cohort |
| 4. Awareness raising: Ensure researchers know the benefits of OS and are aware of the training on the OPEN SCIENCE Course (# of communications). | - | - | 3 | <p>This intervention is transversal to categories of Research/ Publications, and Education/skills & Courses.</p> <p>Once the contents have been defined for the OPEN SCIENCE course the project manager will develop a clear overview of the course and its contents which will include publications openly available (as part of the pilot) and other relevant topics. This communication will also include logistics and how to access the courses.</p> <p>The project manager then selects the communication channels for informing the OPUS cohort about the OPEN Science course (see next intervention). Three communications will take place either through Teams calls or through email</p> | OPUS project manager OPUS cohort PIs' teams |

| Skills | | | | | |
|---|-------------|-----------|------------|--|---|
| Skills Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | updates. | |
| 5.Training Intervention: "Train the trainers" (PIs in the cohort) in open science course topics/aspects, e.g., Open access publishing etc (# of trainings). | - | - | 1 | <p>This intervention is transversal to categories Research and Education/skills</p> <p>Train researchers (trainers) on the open science course topics. This will educate researchers (trainers) on how open access can enhance their individual academic profiles and contribute positively to the institution's reputation and researcher assessment metrics, etc.</p> <p>1. The topics of the OPEN SCIENCE course will be developed together with the researchers from the cohort and the advisory board. Firstly, in M11-12, needs will be explored. Cohort Discussions (Month 11-12): During monthly cohort meetings, the project manager will engage in discussions with PIs and their researchers about the key components of the OPEN SCIENCE Course (see next table on skills) that will be organized for them. One of the key components of this course will be OA publishing. PIs will gather feedback on potential concerns and needs regarding OA. The advisory board will approve these topics. This course may cover topics such as Rights Retention, Creative Commons licensing, sharing open data, and success stories from researchers who have benefited from open access, using various tools and repositories (e.g., Zenodo, GitHub, PURE) for research data management, publications, and software sharing. These sessions will tailor content to different academic disciplines and sectors. They will definitely include data management plans, published publications and open science certificates as part of the pilot.</p> <p>2. In M12-13 the project manager will contact external experts on open science to develop the programme (including the date for the training), the course materials and deliver the course.</p> <p>3. RCL will host the OS training for PIs of the cohort in M13-15 and will organise all the logistics required to support it.</p> <p>4. After the course PIs will receive the certificate of OS trainers (see next table on skills).</p> | OPUS project manager OPUS cohort |

| Skills | | | | | |
|-------------------------------|--|--------------|---------------|-----------------------|----------------------------------|
| Skills Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Goals of the interventions | Policy Intervention: Senior Management Approval for Training the Trainers and Providing OS Certificates Why: Gaining senior management approval is essential to ensure institutional support for training initiatives, which legitimises the effort and encourages participation among researchers. Short-term Goals: <ul style="list-style-type: none"> Conduct cohort discussions to identify specific Open Science topics researchers wish to learn about, fostering a sense of ownership in the training agenda. Collaborate with the Advisory Board to refine the course content and certificate template based on input from various stakeholders. Long-term Goals: <ul style="list-style-type: none"> Institutionalise the training programme and ensure it becomes a regular part of professional development offerings, promoting a culture of Open Science within the organisation. Equip a network of trainers who can continue to disseminate Open Science knowledge, thereby enhancing the institution's overall commitment to transparency and accessibility in research. | | | | |
| | Resource Intervention: OPUS Advisory Board Why: An advisory board brings expertise and diverse perspectives to the development of the Open Science course, ensuring that it is relevant and comprehensive. Short-term Goals: <ul style="list-style-type: none"> Form the advisory board to guide the development of the course agenda and address emerging questions related to Open Science. Facilitate discussions to create a robust template for OS certificates, ensuring clarity and consistency in certification. Long-term Goals: <ul style="list-style-type: none"> Create a sustainable governance structure that can adapt to changing Open Science trends and needs, ensuring ongoing relevance of the training programme. Establish the advisory board as a key resource for continuous improvement and innovation in Open Science practices within the institution. | | | | |
| | Repository: Creation of an Internal Repository for Open Science Course Materials Why: A dedicated repository for course materials ensures that trainers have easy access to resources, fostering collaboration and consistency in training delivery. Short-term Goals: Set up an internal repository on the Teams platform for cohort members and advisory board members, facilitating the sharing of course materials and updates. Long-term Goals: Encourage a culture of sharing and collaboration among trainers, enhancing the effectiveness of the training programmes. | | | | |
| | Awareness Raising: Educating Researchers on the Benefits of Open Access Why: Raising awareness about the benefits of Open Access is crucial for fostering an environment that values transparency and accessibility in research. Short-term Goals: <ul style="list-style-type: none"> Organise cohort discussions to engage researchers in identifying key components of the Open Science Course and address any concerns regarding | | | | |
| | | | | | |

| Skills | | | | | |
|-----------------------|---|--------------|---------------|-----------------------|----------------------------------|
| Skills Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | <p>open access.</p> <ul style="list-style-type: none"> Develop the Open Science Course to include a focus on how Open Access enhances academic profiles and institutional reputation. <p>Long-term Goals:</p> <ul style="list-style-type: none"> Cultivate a community of researchers who actively advocate for Open Access, contributing to a shift in institutional culture towards greater openness. Ensure that awareness of Open Science principles continues to grow, positively impacting researcher assessment metrics and institutional reputation. <p>Training: Development of the Open Science Course for trainers</p> <p>Why: Providing comprehensive training on Open Science topics equips researchers with the knowledge and skills necessary to engage in open practices.</p> <p>Short-term Goals:</p> <ul style="list-style-type: none"> Develop the course agenda based on the identified needs of researchers, ensuring it is tailored to the specific contexts and challenges they face. Organise training sessions led by experts, focusing on practical applications of Open Science principles across various disciplines. <p>Long-term Goals:</p> <ul style="list-style-type: none"> Establish a cadre of skilled trainers who can perpetuate the cycle of knowledge sharing within the institution, fostering a culture of continuous learning in Open Science. Achieve widespread adoption of Open Science practices among researchers, leading to enhanced collaboration and transparency in research outputs. | | | | |
| Risks and mitigations | <p>Policy Intervention: Senior Management Approval for Training the Trainers and Providing OS Certificates</p> <ul style="list-style-type: none"> Risk: Resistance from senior management or researchers regarding the approval of the training the trainers and providing OS certificates. Mitigation: Engage in proactive cohort discussions in Month 11 to address concerns and gather feedback to ensure all voices are heard before finalising the approval process. <p>Resource Intervention: Establishment of OPUS Advisory Board</p> <ul style="list-style-type: none"> Risk: The advisory board may lack diverse representation or expertise, leading to inadequate guidance on open science course topics. Mitigation: Ensure the advisory board is composed of a diverse group of experts in OS, and actively seek input from various stakeholders, establishing the board by Month 10 to enrich discussions. <p>Repository: Creation of an Internal Repository for Open Science Course Materials</p> <ul style="list-style-type: none"> Risk: Delays in the integration and launch of the repository could hinder researchers' ability to access open science course materials. Mitigation: Set a clear timeline for repository development with regular updates and check-ins to ensure milestones are met. Establish the internal repository on the Teams platform, making it accessible only to the OPUS project cohort and advisory board members. <p>Awareness Raising: Educating Researchers on the Benefits of Open Access</p> <ul style="list-style-type: none"> Risk: Low awareness or engagement from researchers regarding the benefits of open access. | | | | |

| Skills | | | | | |
|--------------------|---|--------------|---------------|-----------------------|----------------------------------|
| Skills Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | <ul style="list-style-type: none"> Mitigation: Conduct targeted outreach through cohort discussions in Months 11-12 and organise an Open Science course in Months 13-15, emphasizing the benefits of open access and providing clear, accessible information on how it can enhance their academic profiles and contribute positively to the institution's reputation. <p>Training: Development of the Open Science Course for trainers</p> <ul style="list-style-type: none"> Risk: Insufficient training materials or examples may leave researchers unprepared to effectively engage with open science practices. Mitigation: Develop comprehensive training resources, including best practice examples, and continuously update them based on feedback from participants of the Open Science course. Organize OS training for PIs of the cohort in Months 13-15, inviting experts to cover relevant topics as identified in the cohort discussions. | | | | |

2.6.7. Interventions within Education category

Table 2.14: Interventions within Courses for RCL

| Courses | | | | | |
|---|-------------|-----------|------------|--|--|
| Courses Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1.1. Policy intervention: Obtain approval from the senior management of the PI's institutions to create the training on Open Science and use the materials provided by RCL. | - | - | Achieved | The training is designed to equip selected researchers within the pilots, with the necessary skills and knowledge on open science thereby enhancing the overall quality and impact of the using open science practices within the research performing organisations. This approval process will include: 1. Cohort Discussions (Month 14-15): Engage researchers to discuss with their institutions on the process of providing the training to their teams. 2. Final Approval (Month 15): Obtain approval from the Executive Chair of the researcher's institutions. PI's qualification and suitability to deliver these courses can be demonstrated through the trainers' certificates obtained in the open science course organised by RCL. | OPUS cohort Senior management of the PIs' institutions |
| 1.2. Policy intervention: Gain approval from Senior Management for the establishing the OS ambassador's network | - | - | Achieved | This network will spread the Open Science good practices within the institutions and will be composed by the PIs who will receive the certificates of the trainers in open science practices. This approval process will include: 1. Cohort Discussions (Month 14-15): Engage PIs in discussion on the network including logistics and terms of reference. 2. Final Approval (Month 15): Obtain approval from the Executive Chair of the RCL to establish the network. | OPUS project manager OPUS advisory board RCL Executive Chair |
| 2. Resource | - | - | Achieved | This intervention is transversal to all categories (relevant action within | |

| Courses | | | | | |
|---|-------------|-----------|------------|---|---|
| Courses Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| intervention: Establishment of the OPUS Advisory Board responsible for monitoring, assisting and advising on any open science or ethical queries that may arise in the pilot. | | | | this intervention appear in bold). The Advisory Board will be advising the project manager (responsible for the overall implementation of the pilot) on matters related to open science, ethics and data management. This group will consist of RCL staff members and will be operational throughout the OPUS pilot. <ol style="list-style-type: none"> 1. Advisory Board Establishment (Month 10): RCL will establish an advisory board for the OPUS project to provide guidance on the Open Science queries that may arise. This group will consist of RCL staff members with expertise in open science topic. This Advisory Board will support all interventions. 2. Template Design for DMPs (Month 11): The advisory board will agree on the design and structure of the online DMP template for sharing on the website. 3. Advisory board will discuss and suggest some possible funding sources for open access publishing (Month 13-16). See intervention: Research/Publications (Table 2.12). 4. Advisory Board Discussion (Month 15): Engage RCL OPUS advisory board members to discuss the the template for OS certificates for researchers trained by PIs that received RCL certificates for trainers. See intervention table of Education/Skills (Table 2.13) 5. Advisory Board Discussion (Month 15): Engage RCL OPUS advisory board members to discuss the creating of OS ambassadors network, the roles, duties and rewarding system. See intervention: Education/ Courses (Table 2.14). 6. Advisory board will discuss and suggest the process of the publishing open talks publicly available on the RCL website (Month 13-16). See Valorisation/Communication (Table 2.15). | OPUS project manager OPUS advisory board |
| 3. Repository Intervention: Ensure there is an appropriate repository to share open | | | Achieved | The internal repository for the Open Science course materials and skills certificates obtained will be created and stored on the internal Microsoft team's platform. It will be accessible only to the OPUS project cohort and Advisory Board members. Developed materials for training the researchers in that are specific to institutions | OPUS project manager OPUS cohort |

| Courses | | | | | |
|--|----------------|--------------|---------------|--|---|
| Courses Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| science course materials for participants. | | | | will be added to the institutions' internal systems. | |
| 4. Awareness raising: Ensure researchers know the benefits of OS and are aware of the training on the OPEN SCIENCE Course (# of communications). | - | - | 3 | This intervention is transversal to categories Research/ Publications and Education (skills / courses). Once the contents have been defined for the OPEN SCIENCE course the project manager will develop a clear overview of the course and its contents which will include publications openly available (as part of the pilot) and other relevant topics. This communication will also include logistics and how to access the courses. The project manager then selects the communication channels for informing the OPUS cohort about the OPEN Science course (see next intervention). Three communications will take place either through Teams calls or through email updates. | OPUS project manager OPUS cohort PIs' teams |
| 5.Training Intervention: Train researchers in open science course topics (# of trainings). | - | - | 1 | This intervention is transversal to categories Research (Data/Publications) and Education (skills/courses). Train researchers (trainers) on the open science course topics. This will educate researchers (trainers) on how open access can enhance their individual academic profiles and contribute positively to the institution's reputation and researcher assessment metrics, etc. 1. The topics of the OPEN SCIENCE course will be developed together with the researchers from the cohort and the advisory board. Firstly, in M11-12, needs will be explored. Cohort Discussions (Month 11-12): During monthly cohort meetings, the project manager will engage in discussions with PIs and their researchers about the key components of the OPEN SCIENCE Course (see next table on skills) that will be organized for them. One of the key components of this course will be OA publishing. PIs will gather feedback on potential concerns and needs regarding OA. The advisory board will approve these topics. This course may cover topics such as Rights Retention, Creative Commons licensing, sharing open data, and success | OPUS project manager OPUS cohort |

| Courses | | | | | |
|----------------------------|--|--------------|---------------|--|-------------------------------|
| Courses Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <p>stories from researchers who have benefited from open access, using various tools and repositories (e.g., Zenodo, GitHub, PURE) for research data management, publications, and software sharing. These sessions will tailor content to different academic disciplines and sectors. They will definitely include data management plans, published publications and open science certificates as part of the pilot.</p> <p>2. In M12-13 the project manager will contact external experts on open science to develop the programme (including the date for the training), the course materials and deliver the course.</p> <p>3. RCL will host the OS training for PIs of the cohort in M13-15 and will organise all the logistics required to support it.</p> <p>4. After the course PIs will receive the certificate of OS trainers (see next table on skills).</p> | |
| Goals of the interventions | <p>1.1. Policy Intervention: Gain approval from Senior Management of PIs institutions to create Open Science training and utilise materials from RCL. Why: Institutional approval is vital for legitimising and embedding OS training within the organisational structure. It ensures that the training is taken seriously and supported with necessary resources. Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> • Conduct cohort discussions to involve researchers in shaping the training process, ensuring the training meets their needs. • Achieve final approval from senior management, establishing a foundation for the training program. <p>Long-term Goals (Post-Project):</p> <ul style="list-style-type: none"> • Institutionalise Open Science training, contributing to a sustainable culture of openness and transparency in research. • Enhance the overall research quality and collaboration within institutions through ongoing support and training. <p>1.2 Policy Intervention: Gain RCL senior management approval to create an Open Science ambassador network. Why: OS ambassadors' network harnesses the influence of peer leaders to promote Open Science practices, ensuring sustainability and continuous engagement beyond initial training. Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> • Facilitate discussions among researchers to define the role and expectations of OS ambassadors, ensuring relevance and alignment with community needs. • Secure executive approval to formalize the network, establishing a clear path for implementation. <p>Long-term Goals (Post-Project):</p> <ul style="list-style-type: none"> • Develop a self-sustaining network that actively promotes Open Science, leading to broader adoption of open access practices. | | | | |

| Courses | | | | | |
|---------------------|----------------|--------------|---------------|--|----------------------------------|
| Courses Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <ul style="list-style-type: none"> Foster a collaborative spirit among researchers that encourages sharing of best practices and continuous improvement in Open Science initiatives. <p>2.1. Resource Intervention: Establish an advisory board to address Open Science course-related questions Why This Intervention: An advisory board comprising experts ensures that the initiatives remain relevant and effective, providing a structured approach to addressing challenges in implementing Open Science training. Short-term Goals (Within the Project): Form the advisory board to provide immediate guidance and support for the Open Science course.</p> <ul style="list-style-type: none"> Establish a cadre of skilled trainers who can perpetuate the cycle of knowledge sharing within the institution, fostering a culture of continuous learning in Open Science. Achieve widespread adoption of Open Science practices among researchers, leading to enhanced collaboration and transparency in research outputs. <p>1.1. Policy Intervention: Gain approval from Senior Management of PIs institutions to create Open Science training and utilize materials from RCL. Why: Institutional approval is vital for legitimizing and embedding OS training within the organizational structure. It ensures that the training is taken seriously and supported with necessary resources. Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> Conduct cohort discussions to involve researchers in shaping the training process, ensuring the training meets their needs. Achieve final approval from senior management, establishing a foundation for the training program. <p>Long-term Goals (Post-Project):</p> <ul style="list-style-type: none"> Institutionalize Open Science training, contributing to a sustainable culture of openness and transparency in research. Enhance the overall research quality and collaboration within institutions through ongoing support and training. <p>1.2 Policy Intervention: Gain RCL senior management approval to create an Open Science ambassador network. Why: OS ambassadors' network harnesses the influence of peer leaders to promote Open Science practices, ensuring sustainability and continuous engagement beyond initial training. Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> Facilitate discussions among researchers to define the role and expectations of OS ambassadors, ensuring relevance and alignment with community needs. Secure executive approval to formalize the network, establishing a clear path for implementation. <p>Long-term Goals (Post-Project):</p> <ul style="list-style-type: none"> Develop a self-sustaining network that actively promotes Open Science, leading to broader adoption of open access practices. Foster a collaborative spirit among researchers that encourages sharing of best practices and continuous improvement in Open Science initiatives. <p>2.1. Resource Intervention: Establish an advisory board to address Open Science course-related questions Why This Intervention: An advisory board comprising experts ensures that the initiatives remain relevant and effective, providing a structured approach to</p> | |

| Courses | | | | | |
|---------------------|---|--------------|---------------|-----------------------|----------------------------------|
| Courses Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | <p>addressing challenges in implementing Open Science training.</p> <p>Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> Form the advisory board to provide immediate guidance and support for the Open Science course. Engage board members in discussions to outline roles and responsibilities, ensuring clarity and focus. <p>Long-term Goals (Post-Project): Create a dynamic advisory group that continuously informs and enhances Open Science initiatives based on researcher feedback and emerging trends.</p> <p>2.2 Resource Intervention: Establishment of RCL OS Ambassadors' Network</p> <p>Why: Engaging researchers from diverse fields ensures a comprehensive understanding of Open Science challenges and opportunities, facilitating targeted improvements.</p> <p>Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> Establish the network and initiate feedback mechanisms to understand current practices and areas for improvement. Conduct meetings and surveys to continuously collect insights from ambassadors. <p>Long-term Goals (Post-Project): Strengthen inter-institutional collaboration, fostering a community of practice around Open Science.</p> <p>3.Repository: Ensure there is an appropriate repository to share open science course materials for participants:</p> <p>Why: A dedicated repository for course materials ensures that trainers have easy access to resources, fostering collaboration and consistency in training delivery.</p> <p>Short-term Goals: Set up an internal repository on the Teams platform for cohort members and advisory board members, facilitating the sharing of course materials and updates.</p> <p>Long-term Goals: Encourage a culture of sharing and collaboration among trainers, enhancing the effectiveness of the training programs.</p> <p>4. Awareness Raising: Ensure researchers understand the benefits of Open Access through discussions and training.</p> <p>Why: Awareness is fundamental to fostering a culture that values Open Science, which can lead to increased adoption of open access practices.</p> <p>Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> Conduct discussions during monthly meetings to surface concerns and needs regarding open access, ensuring researchers feel heard and engaged. Organize targeted training sessions that educate researchers on the benefits of Open Access. <p>Long-term Goals (Post-Project):</p> <ul style="list-style-type: none"> Create a knowledgeable research community that actively engages with Open Science principles, leading to a broader cultural shift towards openness. Enhance individual academic profiles and institutional reputation through committed engagement with Open Access. <p>5. Training: Open Science Course Development</p> <p>Why This Intervention: Structured training equips researchers with the skills and knowledge necessary to implement Open Science practices effectively.</p> <p>Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> Develop a comprehensive training program based on received materials to ensure relevance and quality. | | | | |

| Courses | | | | | |
|-----------------------|--|--------------|---------------|-----------------------|----------------------------------|
| Courses Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | <ul style="list-style-type: none"> Schedule and execute training sessions for researchers, providing immediate resources for their development. <p>Long-term Goals (Post-Project):</p> <ul style="list-style-type: none"> Build a cadre of researchers proficient in Open Science, fostering widespread adoption of these practices across institutions. Create a culture of sharing and collaboration among researchers through ongoing training and knowledge exchange, ultimately advancing the Open Science agenda. | | | | |
| Risks and mitigations | <p>1.1. Policy Intervention: Gain approval from Senior Management of PIs institutions to create Open Science training and utilize materials from RCL.</p> <ul style="list-style-type: none"> Risk: Resistance from senior management or researchers regarding the approval of the training the trainers and providing OS certificates. Mitigation: Engage in proactive cohort discussions in Month 11 to address concerns, clarify the importance of the training, and gather feedback to ensure all voices are heard before finalizing the approval process. <p>1.2 Policy Intervention: Gain RCL senior management approval to create an Open Science ambassador network.</p> <ul style="list-style-type: none"> Risk: Resistance from RCL senior management in approving the creation of an Open Science ambassador network. Mitigation: Facilitate discussions among researchers to define the role and expectations of OS ambassadors and secure executive approval by demonstrating the long-term benefits and alignment with community needs. <p>2.1. Resource Intervention: Establish an advisory board to address Open Science course-related questions</p> <ul style="list-style-type: none"> Risk: The advisory board may lack diverse representation or expertise, leading to inadequate guidance on open science course topics. Mitigation: Ensure the advisory board is composed of a diverse group of experts in open science, and actively seek input from various stakeholders, establishing the board by Month 10 to enrich discussions. <p>2.2 Resource Intervention: Establishment of RCL OS Ambassadors' Network</p> <ul style="list-style-type: none"> Risk: Difficulty in establishing a comprehensive RCL OS Ambassadors' Network due to varied research backgrounds and interests. Mitigation: Establish the network with a diverse group of researchers and initiate feedback mechanisms to understand current practices and areas for improvement. Conduct regular meetings and surveys to collect insights continuously. <p>3.Repository: Ensure there is an appropriate repository to share open science course materials for participants:</p> <ul style="list-style-type: none"> Risk: Delays in the integration and launch of the repository could hinder researchers' ability to access open science course materials. Mitigation: Set a clear timeline for repository development with regular updates and check-ins to ensure milestones are met. Establish the internal repository on the Teams platform, making it accessible only to the OPUS project cohort and advisory board members. <p>4. Awareness Raising: Ensure researchers understand the benefits of Open Access through discussions and training.</p> <ul style="list-style-type: none"> Risk: Low awareness or engagement from researchers regarding the benefits of open access. Mitigation: Conduct targeted outreach through cohort discussions in Months 11-12 and organize an Open Science course in Months 13-15, | | | | |

| Courses | | | | | |
|---------------------|--|--------------|---------------|-----------------------|----------------------------------|
| Courses Development | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | <p>emphasizing the benefits of open access and providing clear, accessible information on how it can enhance their academic profiles and contribute positively to the institution's reputation.</p> <p>5. Training: Open Science Course Development</p> <ul style="list-style-type: none"> • Risk: Insufficient training materials or examples may leave researchers unprepared to effectively engage with open science practices. • Mitigation: Develop comprehensive training resources, including best practice examples, and continuously update them based on feedback from participants of the Open Science course. Organize OS training for PIs of the cohort in Months 13-15, inviting experts to cover relevant topics as identified in the cohort discussions participants of the Open Science course. Organize OS training for PIs of the cohort in Months 13-15, inviting experts to cover relevant topics as identified in the cohort discussions. | | | | |

2.6.8. Interventions within Valorisation category

Table 2.15: Interventions within Public Speaking for RCL

| Communication | | | | | |
|---|-------------|-----------|------------|--|---|
| Public Speaking | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| 1. Policy Intervention : Gain senior management approval to hold a good practice workshop on open science talks open science talks given | - | - | Achieved | This workshop will highlight what works well and where there may be challenges when sharing experience of open science talks given. It will share best practice. This approval process will include: <ol style="list-style-type: none"> 1. Cohort Discussions (Month 13-15): Engage researchers and staff to discuss their experience of open science talks given and share the good practices 2. Final Approval (Month 14-15): Obtain approval from the Executive Chair of the Research Council of Lithuania on the good practices workshop on Open Science to be organised by RCL. | OPUS cohort RCL Executive chair |
| 2. Resource intervention: Establishment of the OPUS Advisory Board responsible for monitoring, assisting and advising on any open science or ethical queries that may arise in the pilot. | - | - | Achieved | This intervention is transversal to all categories (relevant action within this intervention appear in bold). The Advisory Board will be advising the project manager (responsible for the overall implementation of the pilot) on matters related to open science, ethics and data management. This group will consist of RCL staff members and will be operational throughout the OPUS pilot. <ol style="list-style-type: none"> 1. Advisory Board Establishment (Month 10): RCL will establish an advisory board for the OPUS project to provide guidance on the Open Science queries that may arise. This group will consist of RCL staff members with expertise in open science topic. This Advisory Board will support all interventions. 2. Template Design for DMPs (Month 11): The advisory board will agree on the design and structure of the online DMP template for sharing on the website. 3. Advisory board will discuss and suggest some possible funding sources for open access publishing (Month 13-16). See intervention: | OPUS project manager OPUS advisory board |

| Communication | | | | | |
|--|----------------|--------------|---------------|---|---|
| Public Speaking | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | | | | <p>Research/Publications (Table 2.12).</p> <p>4. Advisory Board Discussion (Month 15): Engage RCL OPUS advisory board members to discuss the the template for OS certificates for researchers trained by PIs that received RCL certificates for trainers. See intervention table of Education/Skills (Table 2.13)</p> <p>5. Advisory Board Discussion (Month 15): Engage RCL OPUS advisory board members to discuss the creating of OS ambassadors network, the roles, duties and rewarding system. See intervention: Education/ Courses (Table 2.14).</p> <p>6. Advisory board will discuss and suggest the process of the publishing open talks publicly available on the RCL website (Month 13-16). See Valorisation/Communication (Table 2.15).</p> | |
| Repository Intervention: Ensure there is an appropriate repository to share open science talks given | - | - | Achieved | <p>The Open Science Talks good practise repository will be integrated into the RCL website (https://lmt.lrv.lt/lt/veiklos-sritys/mokslo-politika/atvirasis-mokslas/), where the OS part is currently undergoing modernisation following its migration to the governmental server and creating new content.</p> <p>The repository is scheduled to be launched by March to May (M16-17) of the next year, providing time for researchers to familiarise themselves with the resources before major project deadlines.</p> <p>The repository will store the Open Science Talks as “good practice examples” that other researchers can draw upon as they develop their own.</p> | OPUS project manager OPUS cohort |
| Awareness raising: Ensure researchers know what open science talks are, what | - | - | 10 | <p>1. Cohort Discussions (Month 12-14)</p> <ul style="list-style-type: none"> During monthly cohort meetings, engage researchers in discussions about the key components of Open Science Talks – what good practices are considered, and what challenges they might face in order to inform the workshop on good practices in open science talks (next intervention). There will be 9 monthly cohort meetings. Detailed guidance (perhaps through an infographic) on how to submit the | OPUS project manager OPUS Cohort |

| Communication | | | | | |
|---|---|-----------|------------|--|---|
| Public Speaking | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| the good practices are and the challenges they may face (# of actions). | | | | link on Open Science talk to the RCL website's <i>good practice repository</i> will be prepared. | |
| Training: Ensure there are best practice examples of Open Science practices that researchers can access (# of workshops) | | | 1 | Workshop on best practice examples (Month 15-18): <ul style="list-style-type: none"> Including best practice examples of open science talks that have been given. Sharing experiences and highlighting challenges. | OPUS project manager OPUS Cohort |
| Goals of the interventions | <p>Policy Intervention: Approval of Open Science Good Practices Workshop</p> <p>Why: Securing senior management approval for an open science workshop is crucial as it signals institutional commitment to open science principles. Gaining the support of leadership enhances the legitimacy of the initiative and ensures alignment with broader research objectives.</p> <p>Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> Facilitate cohort discussions that engage researchers and staff in meaningful conversations about open science practices, fostering a culture of openness and collaboration. Obtain formal approval from the Executive Chair of the Research Council of Lithuania (RCL), which will validate the importance of the workshop and set the stage for its implementation. <p>Long-term Goals (After the Project):</p> <ul style="list-style-type: none"> Establish a sustained commitment to open science practices within the institution, leading to ongoing workshops and discussions that promote continual improvement and adaptation of open science principles. Develop a framework for integrating open science practices into the organization's policies, ensuring that they become a standard part of the research process. <p>Resource Intervention: Establishment of OPUS Advisory Board</p> <p>Why: Creating an advisory board dedicated to open science allows for continuous support and guidance on emerging queries and challenges. This collaboration enhances expertise and promotes a culture of open science through shared knowledge.</p> <p>Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> Form the OPUS advisory board to provide immediate support and guidance to researchers navigating open science queries, ensuring they have access to expert advice. Develop templates and resources that facilitate the publication of open science talks on the RCL website, enhancing accessibility and transparency. | | | | |

| Communication | | | | | |
|-----------------|--|--------------|---------------|-----------------------|----------------------------------|
| Public Speaking | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| | <p>Long-term Goals (After the Project):</p> <ul style="list-style-type: none"> Build a sustainable structure for ongoing advisory support, ensuring that researchers have a reliable resource for open science practices in the future. Foster a community of practice that continues to share knowledge and best practices, contributing to a more robust open science ecosystem within the institution. <p>Repository Intervention: Establishing a Repository for Open Science Talks</p> <p>Why: An accessible repository for open science talks is essential for promoting transparency and sharing knowledge among researchers. It enables easy access to resources, facilitating the adoption of open science practices.</p> <p>Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> Launch the repository on the RCL website, ensuring that researchers have immediate access to course materials and resources related to open science. Allow time for researchers to familiarize themselves with the repository before key project deadlines, promoting engagement and utilization. <p>Long-term Goals (After the Project):</p> <ul style="list-style-type: none"> Create a comprehensive and continuously updated repository that serves as a go-to resource for researchers, encouraging the ongoing sharing of knowledge and best practices in open science. Establish a culture of resource sharing and collaboration that extends beyond the project, impacting future open science initiatives. <p>Awareness Raising: Understanding Open Science Talks</p> <p>Why: Raising awareness about open science talks is critical for fostering a culture of openness. By ensuring that researchers understand the importance and implementation of these talks, we can drive engagement and participation.</p> <p>Short-term Goals (Within the Project):</p> <ul style="list-style-type: none"> Conduct cohort discussions to educate researchers on the significance of open science talks and how they can participate effectively. Organize workshop to demonstrate good and bad practices, providing concrete examples that researchers can relate to. <p>Long-term Goals (After the Project):</p> <ul style="list-style-type: none"> Cultivate a deep-seated understanding of open science across the institution, leading to more robust participation in open science initiatives. Embed the principles of open science into the institutional culture, ensuring that they influence future research practices and discussions. <p>Training: Access to Best Practice Examples</p> <p>Why: Providing access to best practice examples through training ensures that researchers have concrete, actionable insights into implementing open science practices effectively.</p> <p>Short-term Goals (Within the Project): Organize the Open Science Talks workshop, focusing on practical applications and examples, thereby equipping researchers with the knowledge they need to adopt open science practices.</p> | | | | |

| Communication | | | | | |
|--------------------------|--|--------------|---------------|-----------------------|----------------------------------|
| Public Speaking | | | | | |
| Intervention(s) | Baseline M0 | Target M9 | Target M18 | Description of action | Who is involved in the action |
| Risks and mitigations | Policy Intervention: Approval of Open Science Good Practices Workshop <ul style="list-style-type: none"> Risk: Resistance from senior management or researchers regarding the approval of the open science workshop. Mitigation: Engage in proactive cohort discussions to address concerns, clarify the importance of the workshop, and gather feedback from stakeholders to ensure alignment with institutional goals. | | | | |
| | Resource Intervention: Establishment of OPUS Advisory Board <ul style="list-style-type: none"> Risk: The OPUS advisory board may lack diverse representation or sufficient expertise, leading to inadequate support for researchers. Mitigation: Ensure the advisory board includes a diverse group of experts in open science and actively seek input from various stakeholders to enrich its capacity and effectiveness. | | | | |
| | Repository Intervention: Establishing a Repository for Open Science Talks <ul style="list-style-type: none"> Risk: Delays in launching the repository for open science talks could impede researchers' access to essential resources. Mitigation: Establish a clear timeline for the repository's development with regular updates and check-ins to ensure milestones are met, allowing researchers time to familiarize themselves with the system. | | | | |
| | Awareness Raising: Understanding Open Science Talks <ul style="list-style-type: none"> Risk: Low awareness or engagement from researchers regarding the significance of open science talks may hinder participation. Mitigation: Conduct targeted outreach through cohort discussions and workshops, emphasizing the importance of open science talks and providing clear, accessible information on how to engage. | | | | |
| | Training: Access to Best Practice Examples <ul style="list-style-type: none"> Risk: Insufficient training materials or examples may leave researchers unprepared to effectively implement open science practices. Mitigation: Develop comprehensive training resources, including best practice examples, and continuously update them based on participant feedback from the Open Science Talks workshop | | | | |

The **reward system** for RCL is the following:

The cohort of researchers will be rewarded with these opportunities:

- a. To attend an Open Science Training for trainers, where PIs will be trained by experts in Open Science. After the course, they will receive certificates as well as become RCL OS ambassadors within their institutions.
- b. As a token of appreciation for PIs' active engagement in the OPUS project, participants will be awarded with a Certificate of Contribution to the Development of the Lithuanian OS System at RCL and across the country. This certificate symbolises the pivotal role each ECRs has played in shaping and enhancing the Lithuanian OS framework. To elevate this recognition, a special side event will be organised, where these certificates will be formally introduced to the RDI community, including their presentation by the Chair.
- c. Moreover, the commitment extends beyond a one-time acknowledgment. RCL is dedicated to continuously promoting the OS efforts of these researchers as they progress in their research careers. This ongoing support aims to ensure that their dedication, give the platform to share their talks on open science, help them to spread the word by creating the broader landscape of research excellence.
- d. Projects who are participating in the OPUS pilot phase will gain more visibility through social media channels and RCL networks.

3. Conclusions

The action plans included in this document have been devised and revised by the RPOs and RFOs with the participation of higher management in the decision-making process. While each pilot has its distinctive strategy for the implementation of the interventions, due to the nature of the organisations, the implementation of the pilots will differ from RPOs to the RFOs. While the RPOs can identify their cohort within the research community affiliated to their Institutions, the RFOs will select their cohorts through their project call applications and are subject to different complications.

It is important to note that pilots will further break down the action plans into more operational day-to-day activities within their institutions.

The reporting on the baselines and targets of the indicators and interventions implemented by each pilot so far will be included in the intermediate evaluation reports, D2.3 and D3.3. These will determine whether the baselines and targets were achieved.

Subsequent actions within the OPUS project encompass the implementation of the action plans between January 2024 and June 2025, engaging in mutual learning exercises and including the main findings of the common interventions into the policy briefs of WP5 (Policy Briefs on OS).

4. Annexes

4.1. Annex I: Targets for the indicators for all Pilot Organisations

4.1.1 Pilot #1: UNL

Table 4.1.1: Baseline and Targets for Data Management Indicators for UNL Pilot

| Indicator | Baseline M0 | Target M9 | Target M18 |
|--|-------------|-----------|------------|
| Archived (FAIR) Data Sets Openly Available [OPT] | GMTH: 0 | GMTH: 1 | GMTH: 3 |
| | MagIC: 0 | MagIC: 1 | MagIC: 3 |

Table 4.1.2 Baseline and Targets for Software Development Indicators for UNL Pilot

| Indicator | Baseline M0 | Target M9 | Target M18 |
|---|-------------|-----------|------------|
| Archived Software Sets Openly Available [OPT] | MagIC: 0 | MagIC: 1 | MagIC: 3 |

Table 4.1.3: Baseline and Targets for Publication Drafting Indicators for UNL Pilot

| Indicator | Baseline M0 | Target M9 | Target M18 |
|---|-------------|------------|------------|
| Published Publications Openly Available [OCM] | GMTH: 66% | GMTH: 68% | GMTH: 71% |
| | MagIC: 66% | MagIC: 68% | MagIC: 71% |

Table 4.1.4: Baseline and Targets for Citizen Engagement Indicators for UNL Pilot

| Indicator | | Baseline M0 | Target M9 | Target M18 |
|---|-------------|-------------|-----------|------------|
| Citizen Science Activities involving Open Science Ongoing [PRO] | Projects | GMTH: 0 | GMTH: 0 | GMTH: 1 |
| | Materials | GMTH: 0 | GMTH: 3 | GMTH: 6 |
| | Engagements | GMTH: 0 | GMTH: 3 | GMTH: 6 |

4.1.2. Pilot #2: UCY

Table 4.1.5: Baseline and Targets for Data Management Indicators for UCY Pilot

| Indicator | | Baseline M0 | Target M9 | Target M18 |
|--|-----------|-------------|-----------|------------|
| Archived (FAIR) Data Sets Openly Available [OPT] | | 5 | 10 | 30 |
| Openly Available (FAIR) Data Sets Accessed [OCM] | Views | 6248 | +20% | +50% |
| | Downloads | 1581 | +10% | +30% |

Table 4.1.6: Baseline and Targets for Software Development Indicators for UCY Pilot

| Indicator | | Baseline M0 | Target M9 | Target M18 |
|---|-------|-------------|-----------|------------|
| Archived Software Sets Openly Available [OPT] | | 0 | +10 | +25 |
| Openly Available Software Sets Accessed [OCM] | Views | 0 | +20% | +50% |
| | Stars | 0 | +15% | +30% |

| Indicator | | Baseline M0 | Target M9 | Target M18 |
|-----------|-----------|-------------|-----------|------------|
| | Watchers | 0 | +10% | +20% |
| | Forks | 0 | +5% | +15% |
| | Downloads | 0 | +10% | +30% |
| | - | 0 | - | - |

Table 4.1.7: Baseline and Targets for Publication Drafting Indicators for UCY Pilot

| Indicator | | Baseline M0 | Target M9 | Target M18 |
|---|-----------|-------------|-----------|------------|
| Submitted Publications Openly Available [OPT] | | 10 | +20% | +30% |
| Published Publications Openly Available [OCM] | | 62 | +15% | +30% |
| Openly Available Publications Accessed [OCM] | Views | 3997 | +20% | +50% |
| | Downloads | 5976 | +10% | +30% |
| Openly Available Publications Cited [OCM] | | 441 | +5% | +10% |

4.1.3 Pilot #3: UNIRI

Table 4.1.8: Baseline and Targets for Publication Drafting Indicators for UNIRI Pilot

| Indicator | Baseline M0 | Target M9 | Target M18 |
|---|-------------|-----------|------------|
| Published Publications Openly Available [OCM] | 68% | 72% | 73% |

Table 4.1.9: Baseline and Targets for Skills Development Indicators for UNIRI Pilot

| Indicator | Baseline M0 | Target M9 | Target M18 |
|---|-------------|-----------|------------|
| Open Science Skills Certificates Obtained [OCM] | 0% | 20% | 50% |

Table 4.1.10: Baseline and Targets for Public Speaking Indicators for UNIRI Pilot

| Indicator | Baseline M0 | Target M9 | Target M18 |
|------------------------------------|-------------|-----------|------------|
| Appearances Openly Available [OCM] | 0% | 5% | 10% |

4.1.4. Pilot #4: UEFISCDI

Table 4.1.11: Baseline and Targets for Data Planning Indicators for UEFISCDI Pilot

| Indicator/Metric | Baseline M0 | Target M9 | Target M18 |
|--|-------------|-----------|------------|
| FAIR Data Management Plans Being Developed [PRO] | 0% | 0% | 100% |
| FAIR Data Management Plans Finalised [OPT] | 0% | 0% | 0% |
| To be completed after the OPUS project. | | | |

4.1.5. Pilot #5: RCL

Table 4.1.12: Baseline and Targets for Data Planning Indicators for RCL Pilot

| Indicator | Baseline M0 | Target M9 | Target M18 |
|--|-------------|-----------|------------|
| Developing Data Management Plans Openly Available [OPT, % of the total cohort DMPs agreed to be made openly available] | 0% | N/A | 40% |

Table 4.1.13: Baseline and Targets for Publication Drafting Indicators for RCL Pilot

| Indicator | Baseline M0 | Target M9 | Target M18 |
|--|-------------|-----------|------------|
| Published Publications Openly Available [OCM, % of total published articles] | 0% | N/A | 50% |

Table 4.1.14: Baseline and Targets for Skills Indicators for RCL Pilot

| Indicator/Metric | Baseline M0 | Target M9 | Target M18 |
|--|-------------|-----------|------------|
| Open Science Skills Certificates Obtained [PRO, % of trainers obtaining OS certificates] | 0% | N/A | 80% |

Table 4.1.15: Baseline and Targets for Course Development Indicators for RCL Pilot

| Indicator/Metric | Baseline M0 | Target M9 | Target M18 |
|---|-------------|-----------|------------|
| Open Science Courses Being Implemented [PRO, % of researchers taught by PIs and trained by RCL] | 0% | N/A | 80% |

Table 4.1.16: Baseline and Targets for Public Speaking Indicators for RCL Pilot

| Indicator/Metric | Baseline M0 | Target M9 | Target M18 |
|--|-------------|-----------|------------|
| Appearances on Open Science Given [OPT, % of PIs that will give talks on Open Science] | 0% | N/A | 60% |

4.2. Annex II: Pilot Changes and Explanations for Action Plan Revisions

Table 4.2.1: Changes in the Action Plan for UNL

| Section | Intervention | Change in the description/targets | Reason for Change |
|--|-----------------------------------|--|--|
| Section 2.2.2 | | The number of researchers decrease from 15 to 13. | In the first phase of the piloting the cohort was composed by 15 researchers, however the researchers Gonalo Seixas from GHTM and Joao Fonseca from MagIC finished their contracts at 30 th august and 1 st of october, respectively, and moved to different institutions. It's important to emphasise that these researchers actively participated in the first pilot phase until the end of their contract. |
| Action Plan (section 2.2.4) – Research category, Subcategory Data | Intervention 1: Policy | The target for M9 and M18 has been adjusted when compared to D4.1. The target for M9 <i>approval of UNL's OS policy</i> and the target at M18 <i>adoption of UNL's OS policy</i> were eliminated and a new target was defined at M18 <i>achieved</i> . | The targets were adjusted because UNL OS policy is approval is dependent of the National Policy, which has not yet been approved. In the meantime, to support researchers, UNL has developed an OS guide that addresses the key aspects of Open Science. This guide is in the final stages of drafting and is pending internal approval. UNL expects to have the guide approved and disseminated to the Schools by M18. Furthermore, if the FCT policy is approved before M18, UNL will align its own OS policy and have it approved by M18 |
| | Intervention 2: Resource | FTE defined as 0,1 FTE (~4 hours/week) | Decision made on final FTE. |
| | Intervention 3: Repository | 1. Text addition: <i>Being fully engaged means that the researchers have received the necessary training and are proficient and up-to-date in using the software.</i> 2. Text elimination: <i>There is already an existing "UNL" community at Zenodo. The cohorts will be invited to join it. The communities at Zenodo are a shared area curated and managed by, in this case, the management team in each</i> | 1. Added for greater clarity. 2. UNL will continue to use Zenodo as a repository, but the researchers from the cohorts will not be invited to join the "UNL community" as was planned before. UNL realized that integrating researchers into the "UNL community" in Zenodo would reduce their autonomy. Additionally, managing this community would pose significant challenges. |

| Section | Intervention | Change in the description/targets | Reason for Change |
|--|-----------------------------------|--|---|
| | | <i>cohort, which will be able to not only monitor submissions but also provide support to the cohort, in terms of their user experience.</i> | |
| | Intervention 4: Awareness | 1. The Awareness and Training interventions were separated. 2. The target from awareness were redefined. The target at M9 will be 2 and the target for M18 will be 3. | 1. For better clarity, the Awareness and Training interventions were separated, as they serve different purposes. In the Awareness sessions, researchers will be informed about various Open Science (OS) topics and relevant policies. In contrast, the Training workshops will focus on teaching researchers how to apply and implement specific OS practices and tools. 2. The targets for M9 and M18 were defined based on the topics described in deliverable D4.1. |
| | Intervention 5: Training | 1. The target from awareness were redefined. The target at M9 will be 2 and the target for M18 will be 6. | 1. By M18, three additional open science (OS) workshops are planned to offer researchers a more engaging and comprehensive experience. Originally, all topics were to be covered in a single workshop, but they were later split into multiple sessions. This change enables a deeper exploration of each subject and provides participants with a more interactive experience. These workshops are organized around the topics outlined in the deliverable D4.1, with their number and focus modified to address the evolving needs of researchers observed throughout the plan's implementation. |
| Action Plan (section 2.2.4) – Research category, Subcategory Software | Intervention 1: Policy | The changes of these five transversal interventions are the same as for the research category. | The reasons for changes of these five transversal interventions are the same as for the research category. |
| | Intervention 2: Resource | | |
| | Intervention 3: Repository | | |
| | Intervention 4: Awareness | | |
| | Intervention 5: Training | | |

| Section | Intervention | Change in the description/targets | Reason for Change |
|--|-----------------------------------|--|--|
| Action Plan (section 2.2.4) – Research category, Subcategory Publication | Intervention 1: Policy | The changes of these five transversal interventions are the Same as for the research category. | The reasons for changes of these five transversal interventions are the same as for the research category. |
| | Intervention 2: Resource | | |
| | Intervention 3: Repository | | |
| | Intervention 4: Awareness | | |
| | Intervention 5: Training | | |
| | | | |
| Action Plan (section 2.2.5) – Valorisation category: Subcategory Citizen Engagement | Intervention 1: Policy | Target from M9 moved to M18. | This change is primarily due to the dependency on the forthcoming FCT National Policy, which is yet to be published. UNL has already drafted its Open Science (OS) policy, but it may require alignment with the national guidelines once they are released. Additionally, an internal assessment is still ongoing to determine which repositories or systems are best suited for collecting and monitoring citizen science activities in the UNL context. This extra time allows for more comprehensive planning and ensures that the finalized policy and guidelines will be fully informed by both internal needs and external regulations. |
| | Intervention 2: Resource | FTE defined as 0,1 FTE (~4 hours/week). | Decision on final FTE taken. |
| | Intervention 3: Repository | Target from M9 moved to M18. | To ensure the most effective implementation of a repository for tracking citizen science activities, UNL have adjusted the target timeline from M9 to M18. This decision was made to allow sufficient time for an internal assessment, which is crucial to identify the most suitable repository or system for UNL's specific context. By extending the timeline, we aim to ensure that the selected solution is fully aligned with the institution's infrastructure and user needs, allowing for smoother implementation and |

| Section | Intervention | Change in the description/targets | Reason for Change |
|-----------------|----------------------------------|--|--|
| | | | ongoing support. |
| | Intervention 4: Awareness | 1. The Awareness and Training interventions were separated. 2. The target from awareness were redefined. The target at M9 will be 1 and the target for M18 will be 2. | 1. For better clarity, the Awareness and Training interventions were separated, as they serve different purposes. In the Awareness sessions, researchers will be informed about various Open Science (OS) topics and relevant policies. In contrast, the Training workshops will focus on teaching researchers how to apply and implement specific OS practices and tools. 2. The targets for M9 and M18 were defined based on the topics previously described in deliverable D4.1. |
| | Intervention 5: Training | The target from training were redefined. The target at M9 will be 0 and the target for M18 will be 2. | To better align the workshops with the researchers' identified needs, it was decided to conduct the training workshops between M10 and M18, rather than before M9. UNL will develop three workshops, focusing on the topics outlined in Deliverable D4.1 |
| Rewards: | | Final rewards for OS were defined. | Internal decision on final rewards for OS practices. |

Table 4.2.2: Changes in the Action Plan for UCY

| Section | Intervention | Change in the description/targets | Reason for Change |
|---|--|--|--|
| Section 2.3.2 | | Number of ECRs in the cohort modified from 15-20 to 12. | After announcing an open invitation to KIOS ECRs, 12 was the final number of volunteers that actually signed up to participate in the pilot. |
| Section 2.3.3 | | <ol style="list-style-type: none"> Explanation under 'publications' modified: In particular, the Author Accepted Manuscript (in case of Green open access) or version of record (in case of Gold open access) of all journal/conference publications must be made available online on the KIOS CoE Open Knowledge Portal on Zenodo as soon as possible (after being assigned a DOI by the publisher), with no embargo period and under the CC BY license. The approval of this policy is taking place within the context of the OPUS pilot Paragraph about "reproducible research" eliminated. | <ol style="list-style-type: none"> The text modification is in-line and reflects more accurately the EU policy adopted by KIOS. The pilot will continue to work in this indicator but not in the framework of the OPUS project. |
| Action Plan (section 2.3.4) – Research category: Subcategories of Publications, Data, Software | Intervention 1: Policy | The name of the intervention has been adjusted when compared to D4.1. The in D4.1 was <i>Seek (KIOS) management approval and decision to collect relevant metrics</i> . | To better reflect the group of actions related to the Intervention. |
| | Intervention 2: Resource | Target for action 1 (Prepare an "OPUS/OS Champion" "Role & Responsibilities", position document up to M10) moved to M10. | Achievement of task moved to M10 due to greater availability of human resources. |
| | Intervention 3: Repository | Target for action 1 (Establish a channel of communication/cooperation between KIOS and the curators of UCY's repository (GNOSIS) by M10) moved to M10. | Achievement of task moved to M10 due to greater availability of human resources. |
| | Intervention 4: Awareness Raising | <ol style="list-style-type: none"> The name of the intervention has been adjusted when compared to D4.1. The name in D4.1 was <i>Ensure researchers understand the benefit of recording the number of relevant metrics and that they trust the process and understand the link to researcher assessment</i>. Regarding the three official communications: the chosen dissemination method at the start of the project was through the Newsletter (see point a) and the chosen communication method regarding project achievements was through a podcast by M13, instead of M9 (see point | <ol style="list-style-type: none"> To better reflect the group of actions related to the Intervention. The Newsletter is widely read amongst UCY staff, and the podcast was moved to a later stage to allow for greater progress and podcast content. 3-4. rephrased for greater clarity. 5. Inclusion of an intervention on dissemination because the commencement of the pilot |

| Section | Intervention | Change in the description/targets | Reason for Change |
|--|--|--|---|
| | | b). 3. OS week action rephrased. 4. Open Data Day rephrased. 5. Addition of an intervention on dissemination and deletion of intervention on trust (Trust in OS module delivered by Trust Inside). Targets at M9 and M18 modified. | generated internal interest in events, seminars and other initiatives on OS. Intervention on Trust was deleted from this part of the action plan since it features in section 2.2. The targets have been modified and corrected to reflect the changes in the actions. |
| | Intervention 5: Training | 1. The name of the intervention has been adjusted when compared to D4.1 in order. The name in D4.1 was <i>Train researchers</i> in where and how to record numbers related to metrics. 2. Addition of a second introductory seminar for the cohort (see point 2). 3. Training on OS tools and repositories was moved from M9 to M16. 4. The training <i>train the trainer</i> for “OPUS/OS Champion” was moved from M6 to M11 and the description of the course was elaborated. 5. The final training on how to develop an OS CV will be held by M15. Targets at M9 and M18 modified. | 1. To better reflect the group of actions related to the Intervention. 2. New action to better introduce the participating cohort to the pilot, better familiarize them with the project, discuss suggestions and expected outcomes bilaterally. 3. Change in delivery date due to technical reasons: upgrade and update of the repository. 4. Change in delivery date depending on completion of the resource intervention (see action 1). 5. Addition of delivery month for greater clarity. The targets have been modified and corrected to reflect the changes in the actions. |
| Annex I: Targets for the indicators for all pilot organisations Table 4.3.2 | Data Management Indicators | 1. The target for <i>Archived (FAIR) Data Sets Openly Available [OPT]</i> at M9 changed from 15 to 10 and revised upwards the baseline target from 5 to 7. 2. The baselines for <i>Openly Available (FAIR) Data Sets Accessed [OCM]</i> were set at 6248 for views and 1581 for downloads respectively. | 1. With the pilot (and the OPUS project) progressing, targets were revised from KIOS' Open Science Committee based not only on the feedback received from the participating ECRs but also from past performances achieved collectively in KIOS and KIOS' target-setting for future accomplishments. 2. Baseline targets were indicated based on the feedback received internally, directly from the input given by the cohort volunteers (KIOS' 12 ECRs) |
| | Software Development Indicators | 1. The target for <i>Archived Software Sets Openly Available [OPT]</i> changed from +30 to +10 at M9 and from +45 to +25 at M18. 2. The baselines for <i>Openly Available Software Sets Accessed</i> | 1. With the pilot (and the OPUS project) progressing, targets were revised from KIOS' Open Science Committee based not only on the |

| Section | Intervention | Change in the description/targets | Reason for Change |
|---------|--|--|---|
| | | <p>[OCM] were set at 0 (views), 0 (stars), 0 (watchers), 0 (forks) and 0 (downloads).</p> <p>3. The targets at M9 and M18 for views have changed to +20 and +50 respectively (from +10 and +30, respectively).</p> <p>4. Finally the target at M9 for downloads has changed from +15 to +10.</p> | <p>feedback received from the participating ECRs but also from past performances achieved collectively in KIOS and KIOS' target-setting for future accomplishments.</p> <p>2. Baseline targets were indicated based on the feedback received internally, directly from the input given by the cohort volunteers (KIOS' 12 ECRs)</p> <p>3. With the pilot (and the OPUS project) progressing, targets were revised from KIOS' Open Science Committee based not only on the feedback received from the participating ECRs but also from past performances achieved collectively in KIOS and KIOS' target-setting for future accomplishments.</p> <p>4. With the pilot (and the OPUS project) progressing, targets were revised from KIOS' Open Science Committee based not only on the feedback received from the participating ECRs but also from past performances achieved collectively in KIOS and KIOS' target-setting for future accomplishments.</p> |
| | Publication Drafting Indicators | <p>1. The baseline set for <i>Submitted Publications Openly Available [OPT]</i> is 10.</p> <p>2. The baseline for <i>Published Publication Openly Available [OCM]</i> was changed from 70% to 62.</p> <p>3. The target for <i>Published Publication [OCM]</i> at M9 was changed from +80% to +15%. The target at M18 was modified from +100% to +30%.</p> <p>4. The baseline set for <i>Openly Available Publications Accessed [OCM]</i> is 3997 for views and 5976 for downloads.</p> <p>5. The baseline set for <i>Openly Available Publications Cited [OCM]</i> is 441.</p> | <p>1-2. Baseline targets were indicated based on the feedback received internally, directly from the input given by the cohort volunteers (KIOS' 12 ECRs)</p> <p>3. With the pilot (and the OPUS project) progressing, targets were revised from KIOS' Open Science Committee based not only on the feedback received from the participating ECRs but also from past performances achieved collectively in KIOS and KIOS' target-setting for future accomplishments.</p> <p>4-5. Baseline targets were indicated based on the feedback received internally, directly from the input given by the cohort volunteers (KIOS' 12 ECRs)</p> |

Table 4.2.3: Changes in the Action Plan for UNIRI

| Section | Intervention | Change in the description/targets | Reason for Change |
|--|--|--|--|
| Section 2.4.1 | | Paragraph regarding control group deleted. | It was not possible to identify a control group identical in characteristics but from a different faculty. |
| Action Plan (section 2.4.4) – Research category: subcategory Publications | Intervention 2.2: Resource | Text addition: <i>With the integration of the EduDoc website focused on ECRs, by M9 the website will be fully completed with all foreseen functionalities.</i> | Added for greater clarity. |
| | Intervention 4.1: Awareness Raising | Text addition: <i>An ECR-focused website, EduDoc, will be developed by M7 and functionally integrated within the CoZ website by M9.</i> | Added for greater clarity. |
| | Intervention 4.2: Awareness Raising | <ol style="list-style-type: none"> 1. Change in the targets from 1 (by M9) and 3 (by M18) to 3 (by M9) and 6 (by M18). 2. Text addition: <i>ECRs are specifically motivated to apply.</i> 3. Text addition: <i>and through Zenodo, for greater visibility and ensuring they are openly available to anyone.</i> | <ol style="list-style-type: none"> 1. Two additional OS cafes were planned by M9, due to the great interest of ECRs. The topics were: 'The role of the research data manager and the importance of a research data management plan'; 'Research and researcher visibility - why and how?' and 'Development of open-source software for research'. 2. Encouragement of ECRs to apply decided once implementation had started. 3. Added for greater clarity. |
| | Intervention 5: Training | Text additions: <ul style="list-style-type: none"> • <i>Training will be held online. Each session consists of 5 modules chronologically following the process of writing, publishing, and evaluation of research publications.</i> • <i>The module's topics are: information services for researchers and tools to raise author visibility, search tool for research sources, tools for managing research information, tools for publishing research publications, tools for the evaluation of research</i> | Addition for greater clarity on the training session format, structure and topics. |

| Section | Intervention | Change in the description/targets | Reason for Change |
|---|---|---|--|
| | | <i>publications and journals. Open Science is adequately addressed within each of the modules.</i> | |
| Action Plan (section 2.4.4) – Education, Skills | Intervention 2.2: Resource | The changes of these three transversal interventions are the same as for the research category. | The reason for changes of these three transversal interventions are the same as for the research category. |
| | Intervention 4.1: Awareness raising | | |
| | Intervention 4.2: Awareness raising | | |
| | Intervention 5: Training | <ul style="list-style-type: none"> Description modified to reflect the same content as the Training intervention (5) in Research/Publication drafting. Target at M9 modified from 5 to 3 to correct a typo in D4.1. | This intervention is transversal to Research/ Publication Drafting and Education/ Skill Development. |
| Action Plan (section 2.4.4) - Valorisation, Communication | Intervention 4: Awareness raising | Text correction: <i>UNIRI will organise 1 awareness session by M9 and <u>another between M10 and M18.</u></i> | Description of action corrected adding the word 'another' to reflect that one more awareness raising action will take place by M18 (2 in total). Correction from D4.1, which said: <i>and <u>other 2 between M10 and M18.</u></i> This change reflects the target numbers. |
| • Tables - Valorisation, Communication | Intervention 5: Training | Text correction: <i>UNIRI will organise 1 training session by M9 and <u>other 2 between M10 and M18.</u></i> | Description of action corrected adding 'other two' to reflect that two more trainings will take place by M18 (3 in total). Correction from D4.1, which said: <i>and <u>other 3 between M10 and M18.</u></i> This change reflects the target numbers. |
| Annex III: Targets for the indicators for all pilot organisations Table 4.3.2 | <i>Published Publications Openly Available [OCM]</i> | The target at M9 was changed from 70% to 72%. | It was planned for 70% of publications by the target group to be Openly Available. Data analysis showed it was slightly higher, 72% therefore the number for M9 was corrected. |

Table 4.2.4: Changes in the Action Plan for UEFISCDI

| Section/Table | Intervention | Change in the description/targets | Reason for Change |
|-------------------------------------|--------------------------|--|--|
| Section 2.5.2. | | <i>However, due to decisions taken by the Ministry of Research, Innovation and Digitalisation, the calendar of the programme call has changed, the call was launched on 31 of January 2024 (on time), but the successful projects are expected to be announced in the first part of 2025, and might be contracted in April-May 2025. As a result, the second indicator (FAIR Data Management Plans Finalised [OPT]) will not be piloted during the OPUS piloting phase but in due time, aligned with the new calendar of the program call. The OPUS pilot will focus on the development of the FAIR DMPs (FAIR Data Management Plans Being Developed [PRO]) during the second pilot phase.</i> | Policy decisions taken by the Ministry of Research, Innovation and Digitalisation. |
| | | The number of projects increased from 5-16 to <i>20-24 projects</i> . | The budget of the funding instrument was increased and allows for more projects. |
| | | The number of researchers increased from 50-160 to <i>200-240 researchers</i> . | Due to the increase in the number of expected projects to be funded. |
| Section 2.5.3. | | The text has been adjusted to mark the change in the final information package: FAIR DMPs provisions/ criteria has been moved from section "Excellence" to section "Implementation". | The final approved version of the information package for the funding instrument includes the DMP provisions within the implementation section. |
| | | Evaluators assess applications based on the Implementation criteria, section which represents <i>20% in the overall evaluation process</i> . | Percentage updated in accordance with the final information included in the information package. |
| | | Short description - update on the current status of the pilot was added. | The changes in the timeline of the competition have affected the initial planning in the pilot. This does not affect the scope of the pilot, nor the fact that the actions in the pilot eventually lead to actual implementation of both selected indicators of the RAF, even if this will happen after the OPUS pilot is over for the second one. |
| Section 2.5.4. Table 2.9 | Intervention 1.3: | 1. The tasks associated to the intervention were re-planned and text updated. | 1. Although the calendar of the competition changed, and the DMPs will be received |

| Section/Table | Intervention | Change in the description/targets | Reason for Change |
|---------------|-------------------------------------|--|--|
| | Policy | 2. Timeline has been revised | after the Opus pilot will be finished, the intervention will still happen and was re-planned accordingly. 2. Exact start dates of the successful projects are not known for the moment. |
| | Intervention 1.4: Policy | New intervention: <i>Investigate other funding programmes and seek approval to incorporate FAIR DMPs into other program call(s).</i> | As a result of increased awareness and discussions at the level of the institution, the OS and RA team has been encouraged to think of additional interventions to support OS. |
| | Intervention 1.5: Policy | New intervention: <i>Include FAIR DMP provisions into the application form and evaluation criteria of other program call(s), if the case (1.5 dependent on 1.4.)</i> | As a result of increased awareness and discussions at the level of the institution, the OS and RA team has been encouraged to think and support potential additional interventions. |
| | Intervention 2.3: Resource | 1. The target at M9 has been changed when compared to D4.1. from "1" to "0". Target will be reached in M18. 2. A new sub-task was added: <i>the DMP template prepared – agreed version at the institutional level - will be tested with researchers (March – April 2025) and adjusted according to their feedback. In M18, the final version of the template will be ready.</i> | 1. Due to the calendar changes in the competition, the DMP template will need to be ready in 2025 and this gives extra time which will be used for testing the DMP (see below). 2. New subtask added to ensure proper testing and alignment. |
| | Intervention 2.4: Resource | 1. The target at M9 has been changed when compared to D4.1. from "1" to "0". Target will be reached in M18. 2. Description and timeline of the intervention has been made clearer. | Timing of the intervention was adjusted, being dependent to Resource Intervention 2.3. |
| | Intervention 3.1: Repository | This intervention (<i>Integrate DMPs into existing project application/evaluation platform</i>) has been eliminated. | No new features or platform updates to integrate DMPs into the project platform will be needed since in the application phase no DMPs are required from the applicants, only a short RDM description aligned with the FAIR principles. The current requirement for a concise RDM description are embedded in Section B of the application form. This approach meets the necessary data management standards |

| Section/Table | Intervention | Change in the description/targets | Reason for Change |
|---------------|-------------------------------------|---|--|
| | | | without requiring additional platform updates. |
| | Intervention 3.2: Repository | <ol style="list-style-type: none"> 1. Intervention title change: <i>Develop DMP-related specifications into existing project reporting/monitoring platform</i>. The name of the intervention in D4.1 was <i>Integrate DMPs into existing project reporting/monitoring platform</i>. 2. Description of the intervention was slightly updated to better describe the re-planned activities. 3. Estimated time-frame changed. | <ol style="list-style-type: none"> 1. Actual integration in the platform will not be possible in the Opus pilot timeframe 2. The intervention was initially planned to start after the projects start, to be aligned with potential specific requirements. 3. Although the collection of DMPs will not be captured in the OPUS pilot, the specifications for the EVOC platform will be prepared until the end of the pilot. |
| | Intervention 3.3: Repository | 1. Intervention title change: <i>Develop DMP-related specifications for the other existing institutional platforms (e.g., BrainMap, EERTIS)</i> . The name of the intervention in D4.1 was <i>Integrate DMPs into other existing institutional platforms (e.g., BrainMap, EERTIS)</i> . | 1. Actual integration won't be possible in the Opus pilot timeframe. But specifications for the future interventions will be prepared. |
| | Intervention 4.1: | Lunch date of the call for applications related to the pilot funding instrument added: <i>On January 31, 2024, the competition (the call for applications for projects) related to the pilot funding instrument "Centers of Excellence" will be launched.</i> | Reflects the updated schedule. |
| | Intervention 4.2: Awareness | <ol style="list-style-type: none"> 1. Change in the intervention name and scope: <i>Share information on external activities/events on Open Science (incl. about DMPs) with the RDI, OS Community (reaching the potential researchers in the program call)</i>. 2. Intervention description updated 3. Targets at M0 has changed to "ongoing". | <ol style="list-style-type: none"> 1. Updated to include the RDI, OS community members and potential researchers involved in the project. 2. Details provided for the activities and the target groups. 3. Information sharing started in October 2023. |
| | Intervention 4.3: Awareness | This intervention (Encourage researchers in the program call to open their DMPs and other projects' outputs) has been eliminated. | Due to the competition calendar changes, this won't happen in the pilot timeline anymore, but will be done after the pilot is finished. |
| | Intervention 4.4: Awareness | This intervention (<i>Encourage researchers in the program call to use Brain Map platform to share project outputs (incl. DMPs)</i>) has been eliminated. | Due to the competition calendar changes, this won't happen in the pilot timeline anymore, but will be done after the pilot is finished. |
| | Intervention 4.5: Awareness | New intervention: <i>Organize a conference on Research Assessment and Open Science with the RDI, OS Community and potential researchers in the program call as well as European and international experts.</i> | Enhance awareness and engagement. |

| Section/Table | Intervention | Change in the description/targets | Reason for Change |
|------------------------------|-----------------------------------|--|---|
| | Intervention 5.1: Training | Estimated time-frame changed. | Aligned with the new calendar. |
| | Intervention 5.2: Training | <ol style="list-style-type: none"> 1. Change in the intervention name and scope: <i>Run webinars on DMPs with the RDI, OS Community (reaching the potential researchers in the program call)*.</i> 2. Target – group changes; 3. The target at M9 has been changed when compared to D4.1 from “1” to “0” and the target at M18 has been changed from “2” to “1”. The name of the intervention in D4.1 was <i>Run webinars on DMPs for researchers in the program call (#webinars).</i> | <p>Aligned with the new competition call calendar.</p> <p>The trainings with the cohort will not happen in the OPUS pilot time - the (whole) cohort won't be known before the successful projects are contracted, and even then, the project team might not be decided during the timeline of the OPUS pilot. Intervention 5.2. will reach a larger target group.</p> |
| Risks and mitigations | | <ol style="list-style-type: none"> 1. Elimination of the major risk and its mitigation: Major risk for the pilot: political changes are very dynamic; a recent minister change has slowed down the process in final approval of the CoE funding instrument. Mitigation: other funding instruments will be launched in near future, and we'll try to include the Data planning indicators in those, replicating the interventions already planned here. 2. New risk and its mitigation defined: Risk: The activities are dependent on the dynamic political changes and/ or external factors (Government – Ministry changes/ decisions), which influence the funding instrument process (especially the calendar), thus there is a risk of further delays. Mitigation: Maintain regular communication with the policy body to stay updated regarding any changes and status or requirements that may impact the pilot timeline. Define new activities/ interventions to respond/ adapt to the changes, so that the scope of the pilot is met (and have effect - lead to implementation of new indicators from the OPUS RAF in the funding call(s) even after the project ends). | <ol style="list-style-type: none"> 1. Risk is no longer relevant as the funding instrument was launched. 2. Taking into account the recent competition's calendar changes due to external factors, a new risk was defined, along with actions to mitigate it. |
| Rewards: | | Elimination of part the text in the reward section: <i>For the researchers who open their DMPs and those who promote OS practices through their activities in the projects funded through the instrument included in the pilot, an additional intervention could be considered (e.g., promote their work in international</i> | As the calendar of the competition changed, and as the DMPs drafting/ reporting won't happen in the pilot timeline, this is not applicable anymore. Still, this additional |

Action Plans to Implement the Pilots – Initial

| Section/Table | Intervention | Change in the description/targets | Reason for Change |
|--|--------------|--|---|
| | | <i>context, helping them connect with international WGs, initiatives, networks in OS and RDM).</i> | intervention will still be considered, after the pilot/ project ends. |
| Annex I: targets for the indicators for all pilot organisations Table 4.3.4 | | <ol style="list-style-type: none"> 1. The target for M9 the indicator FAIR Data Management 2. Plans Being Developed [PRO] was changed to "0". M18 target was changed from "0" to "100%" 3. The target at M18 for the indicator FAIR Data Management Plans Finalised [OPT] was changed to "0". | Updated according to the delays in the competition: <ul style="list-style-type: none"> • Delays in reaching the first indicator • The DMPs drafting and reporting won't happen in the pilot timeline (but after). |

Open and Universal Science Project (OPUS)

IF YOU WOULD LIKE TO KNOW MORE ABOUT
OUR PROJECT ACTIVITIES, OUR TEAM WOULD LOVE
TO SPEAK TO YOU.

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