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The report brings together a mapping of Open Science (OS) activities across the ENLIGHT university alliance through an Open Science Status Matrix. It highlights good practices, identifies gaps and opportunities for joint action, proposes joint principles, and outlines options for rewards and incentives.

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Executive Summary

This report brings together a mapping of Open Science (OS) activities across all ENLIGHT partner institutions through an Open Science Status Matrix. Information was collected based on a survey among the partners. It highlights current approaches, support and services, good practices, identifies gaps and opportunities for joint action, proposes joint principles, and outlines options for rewards and incentives.

Abbreviations

ENLIGHT partner	Short Name	Country
University of Bordeaux	UBx	FR
Ghent University	UGent	BE
Comenius University Bratislava	CU	SK
University of the Basque Country	UPV/EHU	ES
National University of Ireland, Galway	NUIG	IE
University of Göttingen	UGOE	DE
University of Groningen	RUG	NL
University of Tartu	UT	EE
Uppsala University	UU	SE

DMP – Data Management Plan
 DRI – Digital Research Infrastructure
 EOSC – European Open Science Cloud
 IPR – intellectual property rights
 OA – Open Access
 OE – Open Education
 OS – Open Science
 OSP – Open Science Principles
 PID – Persistent Identifier
 RDM – Research Data Management
 R&I – Research and Innovation

Introduction

Mainstreaming Open Science (OS, also known as: Open Research, Open Scholarship) is one of the core ambitions in the context of the [ENLIGHT university alliance](#). The alliance brings together nine comprehensive, research-intensive universities, which all engage in various ways in support of the implementation of Open Science.

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Open Science as an umbrella term has many facets (e.g. Open Access, Open Data, Open Educational Resources) and individual starting points (e.g. publishing and/or reading Open Access papers, sharing preprints, releasing data under an open license). The following may serve as a reference definition:

“Open Science is the practice of science in such a way that others can collaborate and contribute, where research data, lab notes and other research processes are freely available, under terms that enable reuse, redistribution and reproduction of the research and its underlying data and methods ([FOSTER Open Science Definition](#)). In a nutshell, Open Science is transparent and accessible knowledge that is shared and developed through collaborative networks (Vicente-Sáez & Martínez-Fuentes, 2018).

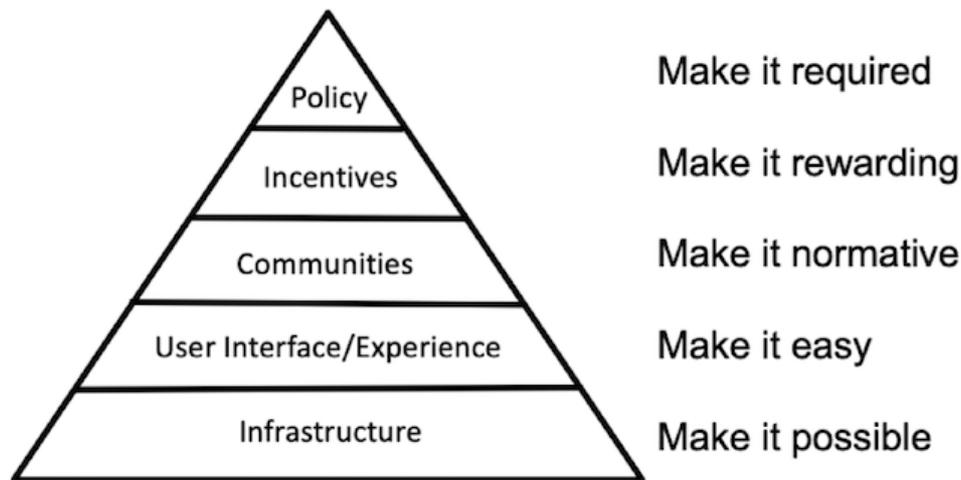
Open Science is about increased rigour, accountability, and reproducibility for research. It is based on the principles of inclusion, fairness, equity, and sharing, and ultimately seeks to change the way research is done, who is involved and how it is valued. It aims to make research more open to participation, review/refutation, improvement and (re)use for the world to benefit.” (FOSTER Open Science Training Handbook, Open Concepts and Principles, 2018)

During the first few months of the ENLIGHT RISE project we have mapped out the current approaches and activities of partner institutions in various activity areas (OA, RDM, OS education and skills, OE, societal participation and engagement), resulting in an overview which we will refer to as *ENLIGHT Open Science Matrix*. This will help us to identify common approaches and opportunities to learn from each other as well as plan further steps on our joint journey in mainstreaming and strengthening OS practices across the ENLIGHT network.

Inspiration for developing the survey on OS has been taken both from surveys conducted by the European University Association (e.g. Morais et al., 2021) as well as from community and infrastructure initiatives such as [OpenAIRE](#), an open scholarly communication infrastructure to support European research, former OS projects (e.g. [Foster Open Science in European Research](#) (FOSTER)) and the recently published UNESCO Open Science Recommendations (UNESCO, 2021).

Furthermore, OS involves a cultural change which builds on various layers of activities (Nosek, 2019):

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In our exploration of the status quo at ENLIGHT partner universities we thus have collected information on currently available infrastructures as a base layer to make OS possible and easy (as possible) for researchers, communities, and policies and incentives related to OS.

Relationships to other work packages

There are various relationships between work package 7 (“Optimize Open Science practices and identify frontiers”) and other work packages, in particular: work package 3 (“Roadmap towards shared digital research infrastructures and responsible DI/AI index”), work package 4 (“Promote early career development & improve researcher assessment”), work package 6 (“Co-create R&I actions with society”), and work package 8 (“Impact assessment and frontiers of the common R&I agenda”).

Through the mapping exercise as described in this deliverable, we touch on infrastructures that are relevant for the implementation of OS (e.g. repositories for publications and/or research data), include societal participation and engagement as one OS activity area and explore what actions are taken to provide OS training to researchers at early and other career stages.

Results from the survey on Open Science

To explore activity areas and investigate opportunities and challenges related to Open Science, ENLIGHT RISE conducted a survey among its partners. The survey was open from 11 December 2021 until 31 January 2022. In the following, we present the first findings from this survey in order to inform ENLIGHT’s current and future activities. The purpose of this survey was to:

- Map current Open Science (OS), Open Access (OA) and research data management (RDM) activities
- Explore common strengths, priorities, gaps, and attitudes towards OS
- Gather input to a shared OS vision for the ENLIGHT alliance.

All nine partners from the network provided a response to the survey, completed primarily by information professionals (librarians, data managers, IT specialists). On request of one institution, a few corrections were made to the collected data, such as changing from a specific answer to “not

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available / non-applicable” (NA). All respondent names and other names mentioned (e.g. potential OS ambassadors) were removed in the final dataset.

The survey was divided into eight parts: general information, assessment of OS activity areas, infrastructure and support, skills and training, community activities, policy, recognition and rewards, and environment.

Data and code availability

Currently the collected data and code is available through a [RStudio Cloud project](#). An anonymised version of the data together with the R Markdown notebook, etc. can be accessed via a [Github repository](#) and will be deposited in Zenodo under an open license.

Assessment of Open Science activity areas

All ENLIGHT partners self-assessed their levels of activity in a range of OS areas: OA, RDM, OS education and skills, open education, societal participation and engagement. In the survey, respondents had to choose an activity level (0 = No activity, 1 = Very low, 2 = Low, 3 = Average, 4 = High, 5 = Very high) based on indicative guidance on what constitutes a high level of activity (e.g. mentioned at policy level, support service provided; for details cf. Appendix survey questionnaires).

Figures 1 and 2 summarise the responses to the question on activities and experiences in five Open Science areas across the ENLIGHT network. Most of these areas are already targeted by all partners, while the activity levels vary substantially.

These visualisations indicate both areas where there is already quite high activity (e.g. OA, OS education and skills, RDM) as well as opportunities to learn from each other in activity areas where some partners have indicated levels of activity (e.g. societal participation and engagement, open education, OS education and skills).

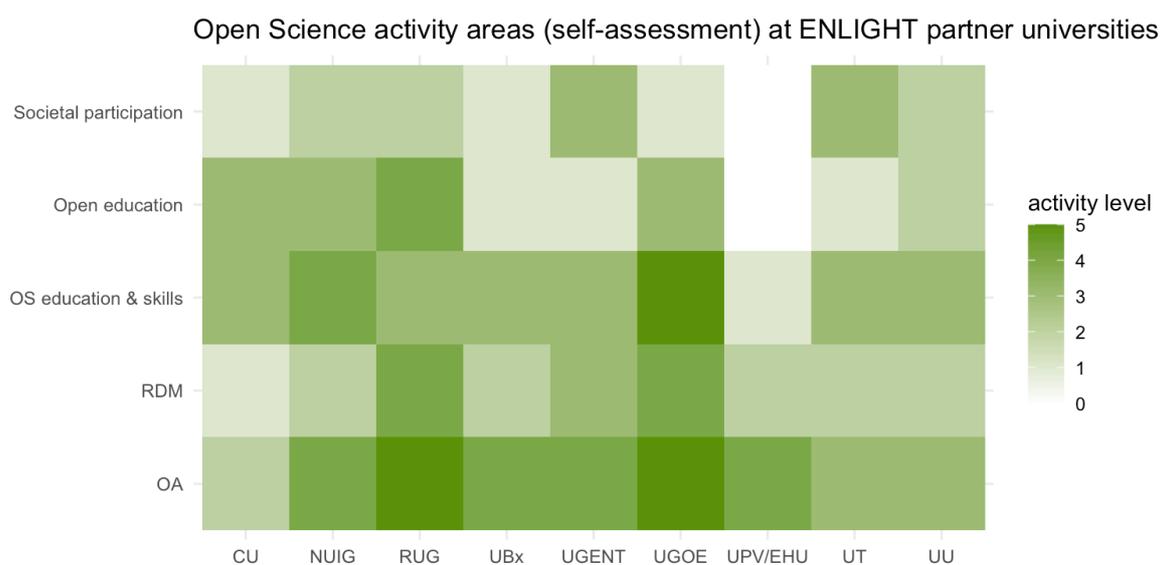


Figure 1. Five core OS activity areas were self-assessed by all ENLIGHT partners in terms of activity levels.

The survey highlighted that OA is the strongest OS activity within the consortium (cf. Figure 2). The majority of the respondents indicated that they had 'high' levels of open access activities (cf. Figure 1 and 2). This is likely because most respondents have an OA publication repository, and engage staff and researchers around the topic.

RDM is fairly strong in most organisations, often as a result of building knowledge in RDM among library communities and reaching out to research groups. RDM materials are also increasingly freely available online to support this activity.

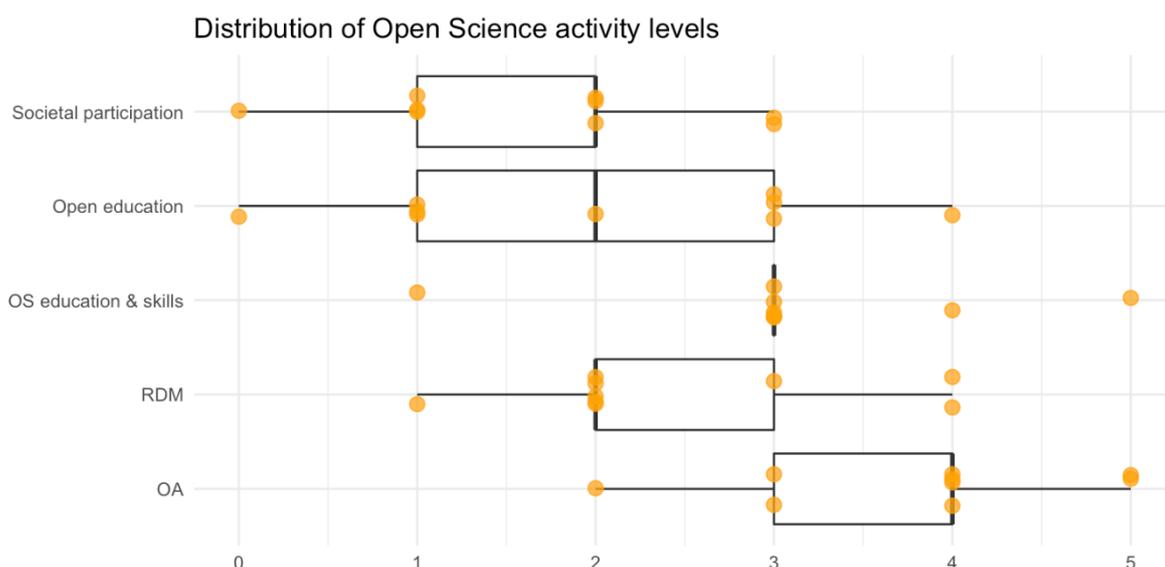


Figure 2. Open Science activities, based on ENLIGHT partners self-assessment.

OS education and skills is already at a median higher level (median = 3). This is likely due to a growing awareness and complementing the development of targeted services (compare following sections), addressing the social and cultural aspects of the implementation of OS. Somewhat lower activity levels on average (median = 2) could be observed for OE and societal participation and citizen engagement. Again, the level of engagement across the ENLIGHT network varies substantially which points to opportunities to learn from each other.

As already indicated, the highest activity level was reported for OA, with a median of 4 ('high activity') (cf. Figure 3).

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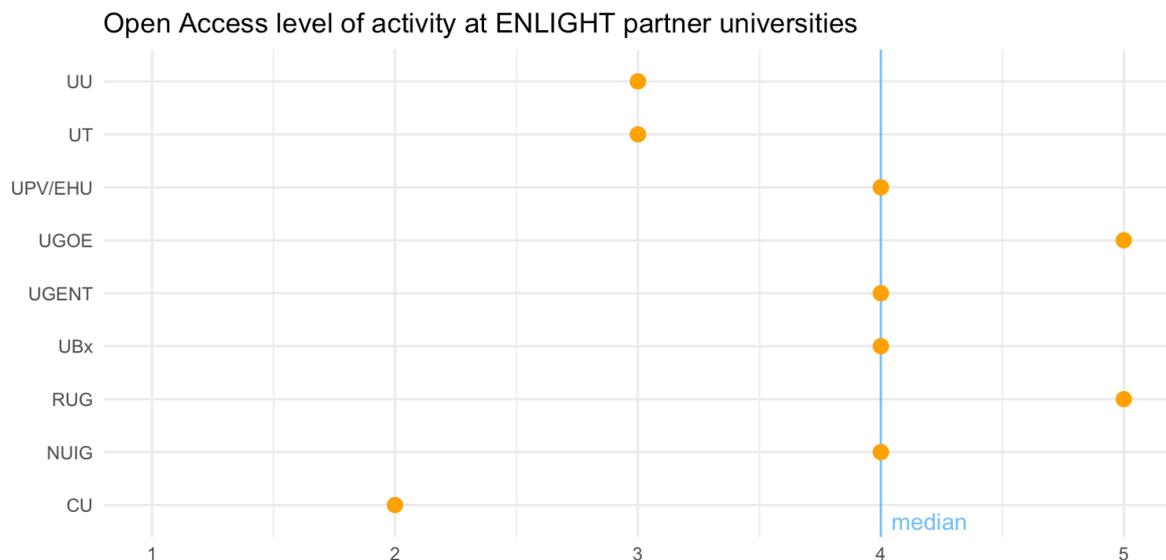


Figure 3. Level of OA activities, based on ENLIGHT partners' self-assessment.

Collaboration opportunities

A range of opportunities and challenges related to OS have been identified through the survey:

- Partners expect benefits from the exchange of experiences and learning from each other, in particular in areas which have not been addressed and where activities are desirable, e.g. the use of open resources in teaching activities.
- Some areas are considered more challenging, e.g. Citizen Science. Training for targeting societal participation and Citizen Science would be desirable. Moreover, interest was expressed in discussing experiences and how the Open Science / research support team engage with and support Citizen Science projects.
- Partners wish to step up and strengthen activities, support, promotion, infrastructure and education related to Open Access to publications, Open Science education and skills, with a particular emphasis on FAIR data and data sharing.
- Skills and education were mentioned as an area where partners would like to collectively explore, in particular identifying necessary or already useful skills and sharing experiences across universities and with researchers. Moreover, a wish for stronger and more visible incorporation of the ENLIGHT RISE network into local campus activities was expressed.
- There was also mention of a need to exchange experiences around the European Open Science Cloud (EOSC), to monitor the progress of OS, and to develop strategies to engage researchers, universities, libraries in OS infrastructures.
- Further, it was suggested to exchange experiences and best practices related to legal and ethical issues in the context of RDM.
- Respondents also highlighted scholarly communication issues around publishing and the Journal Impact Factor and monitoring progress in Open Science.

Infrastructure and support

ENLIGHT partners deliver a wide range of infrastructure and support services related to Open Science, some of these are still under development or under discussion (cf. Figure 4).

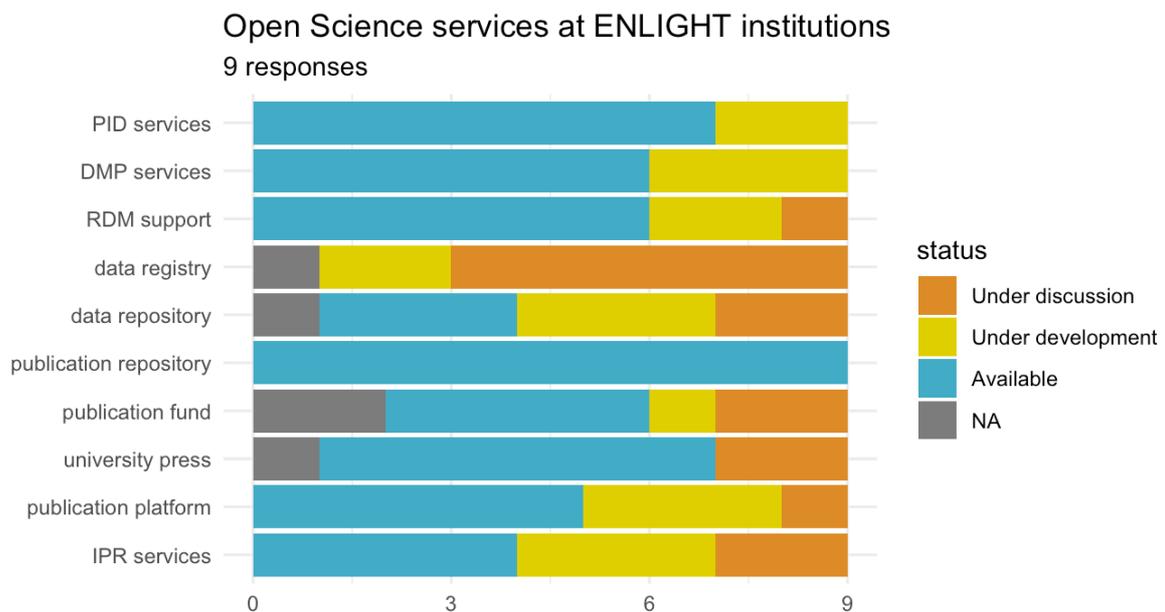


Figure 4. Open Science services as currently provided, under development or under discussion at ENLIGHT partner institutions.

All partners already offer an institutional repository to their researchers for making publications openly available. Correspondingly, the degree of providing persistent identifiers for research outputs is also very high (seven out of nine have the service in place, for two, the service is under development). Several services related to scholarly communication are available across the ENLIGHT network: Six universities host a university press, and five offer a publication platform (three more are under development).

Increasingly universities provide publication funds for OA publishing, based on their own budgets and/or through national or European project-based funding (Morais et al. 2021). These publication funds typically also build on consortia or institutional agreements with publishers (e.g. agreements with OA publishers or transformative agreements).

Across the ENLIGHT network, currently, four institutions have a specific publication fund for OA in place while at one institution such a fund is under development.

Advisory services on data management and data management plans (DMPs) are already in a good position, with 2/3 of all institutions having these services in place and 1/3 under development. A data repository has been established at three institutions while at three other institutions this service is under development or still under discussion (two institutions). Much less activity has been found with regard to setting up a data registry, i.e. a database which registers data related to institutional research while the data is stored at institutional and external facilities.

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Advisory services on intellectual property rights (IPR) are available at four institutions, under development at three institutions.

These services are typically promoted via various channels, e.g. via dedicated service units or competence centres.

The following approaches for OS services are currently implemented at the nine ENLIGHT partner institutions:

- At NUI Galway [Open Scholarship](#) and Open Science is supported in all its diversity. [Research data management at NUI Galway](#) is overseen by a dedicated Data Management Librarian through the James Hardiman Library. Promotion of the DMP services is done through the NUI Galway Research Office directly to researchers applying for, or who have already been awarded research funding. A more general broadcast is available to all NUI Galway staff through web pages. The services provided include information on current best practice, various elements of data curation, and ethics associated with data management. Template DMP plans and case studies are also provided. Open Access publishing at NUI Galway is supported by 23 [transformative agreements](#) and through the provision of the institutional repository [ARAN](#). A more recent focus has been Open Education and the support of [Open Educational Resources](#) (OER).
- At the University of Göttingen (UGOE) services targeting scholarly communication and Open Access publishing are made available via the library (e.g. [Göttingen University Press](#), [publication fund](#), OA repositories, several [agreements with publishers](#) managed by the library or via national consortia). The [Göttingen eResearch Alliance](#) was established in 2014 and is run mutually by the Gesellschaft für Wissenschaftliche Datenverarbeitung (GWDG), the Göttingen State and University Library and the University Medical Center (UMG) as a central point of contact for researchers, research associations and faculties. eResearch services can be accessed through the portal Göttingen Research [Online](#) (GRO) which was launched in 2020, including e.g. [GRO.plan](#), a tool to support data management plan writing, [GRO.data](#), a place to store, edit and publish research data and [GRO.publications](#), a system to manage publications and create publication lists.
- Ghent University (UGent) is committed to supporting Open Science, both through policy as well as infrastructure and guidance. Recent milestones include setting up a data steward team in fall 2019, signing DORA in December 2020 and the update of the scholarly publishing policy in June 2022, with an emphasis on diamond open access. In line with the University library's overall mission "Facilitating open knowledge creation", a dedicated Open Science team has been created, where data stewards and open access support are united, with the goal to promote, support and facilitate open science practices within/beyond Ghent University's research community. The team provides relevant services to Ghent University researchers, monitors and co-shapes institutional/(inter)national policy and strategy, and shares and exchanges knowledge with (external) partners, on scholarly publishing, FAIR and open data, EOSC and skills and education. The activities are mainly situated in the domain of [Research data management](#) and open access to publications. The library hosts a [Janeway instance](#) to support open access journals and conference proceedings, an OpenAIRE compliant [institutional repository](#) to disseminate Ghent University's researchers publications and is developing a data register to support dissemination of Ghent University's open data. To

support DMP writing, Ghent University participates in the [Belgian DMPOnline](#) infrastructure for managing Data Management Plans. These Open Science services are highly connected with the [Ghent University research information system](#). Furthermore, central research coordination takes up Open Science as part of research assessment and research integrity activities. As a partner in different European and Flemish Open Science initiatives, such as OpenAIRE and the Flemish Open Science Board FOSB, and projects, such as EOSC Future, the university collaborates with others to improve the infrastructure and support for Open Science.

- The University of Bordeaux (UBx) has adopted a proactive policy in terms of open access and has enabled the implementation of the following two services:
 - a) [Open U Journals](#), which is an open access journal platform shared between institutional partners and based in different locations in France. It allows to publish the results of higher education institutions' research through OA journals. This portal optimizes the University of Bordeaux's strategy in facilitating open access to academic publications (articles, books and data) targeting the academic community.
 - b) [OSKAR](#) (Open Science Knowledge ARchive), which is a free and open institutional and interoperable repository and can also be searched by other repositories. It aims to support the open science movement and to offer an alternative to the dominant commercial publishing models. It allows to host, preserve, enhance and make accessible all types of scientific publications from the Bordeaux research community (researchers, teachers-researchers, staff, etc.) The deposit of full-text publications in OSKAR Bordeaux concerns the five higher education institutions of the Bordeaux site: the University of Bordeaux, the University of Bordeaux-Montaigne, Sciences Po Bordeaux, Bordeaux INP and Bordeaux Sciences Agro, as well as the public scientific and technological institutions (EPST) that are partners of the site.
- Uppsala University (UU) supports Open Science practices in various ways. The university library has signed a number of [transformative agreements](#), often as a partner in the national Bibsam consortium. A data office at UU is under development and a policy for data management emphasizing Open Science and FAIR data is suggested. Moreover, UU hosts and develops the institutional repository [DiVA](#), used by 50 Swedish universities and research institutions. Aspects of Open Science and data management are included in doctoral programmes and a publishing platform (based on Open Journal Systems - OJS) for OA-journals is underway.
- The University of Tartu (UT) services support OS activities and scholarly communication. The library offers consultations about the management, archiving and publishing of research data. All University of Tartu members can add their data to the institutional data repository [DataDOI](#). University of Tartu offers DOI services for all Estonian research data through the [DataCite Estonia](#) Consortium. OA publishing is available through the [University of Tartu Press](#). Data management trainings are offered by different units in the university.
- At the University of Groningen (RUG), Open Science is embedded in the university strategic plan. Four overarching topics are targeted and embedded via our [OS Program](#): Open Access; FAIR data and software; Open Education (OE) and OE-Resources and Public Engagement. Through the partnership between the University Library ([UB](#)) and our Digital

Competence Center ([DCC](#)), and with the assistance of the Educational Support and Innovation department ([ESI](#)) and the Strategy Department of Education & Research ([SER](#)), the RUG fully supports our research and teaching staff on the OS practices. The UB's Communications department assists in dissemination of the OS practices and the visibility of output within the university.

The OA efforts (lead by UB) are towards making all RUG research outputs openly accessible, while also paying special attention to supporting new sustainable models (e.g. OA book fund/Diamond OA fund) for OA Publishing. The DCC provides information and services that help researches apply the FAIR principles throughout the entire research (data) lifecycle – from grant proposal to data publication and archiving – including, training, support around DMPs, consent forms, guidance on platforms to use and recommending subject-specific repositories and preregistration-possibilities. On Open Education the RUG focusses on encouraging and supporting teachers in adopting and adapting education resources, including training, advice, communication building, tools and infrastructures with which teachers can share and reuse quality open materials. The Center for Public Engagement of the RUG aims to create and maintain connections to society to achieve maximum societal impact. The UB's Communications department, together with the [Central Communication Office](#), the Central Medical Library ([CMB](#)) and the Center for Information Technology ([CIT](#)) is generating and raising awareness about OS at the UG through communication channels like the [OS website](#)/newsletter, the OS Blog and the OS ambassadors as well as through new to be established instruments. With the implementation of the deliverables described per topic, the RUG will move forward to actively stimulate and facilitate the RUG researchers to practice Open Science principles.

- The University of the Basque Country (UPV/EHU) has used an institutional repository ([ADDI](#)) since 2011; this tool facilitates the publication of different materials including certain datasets. In 2019, our University joined the Spanish Universities' commitment to Open Science, among which “to provide open, immediate access in any and all negotiations with scientific publication editors. Other transformative agreements have also been adopted at the national level, with 4 publishers. Regarding training: in doctoral programmes, training is offered on all aspects related to open access, both from a functional and a legal perspective. During the current year, it is foreseen to mention the implementation of a work team to support research staff in DMPs creation and other issues related to OS that might arise in the near future. We are hoping to set on track our Research Portal, which includes a much simplified deposit function into the institutional repository.
- At the Comenius University Bratislava (CU), the majority of the services regarding Open Access publishing, OS support and data management, etc. are offered by the university library. It offers consultations about data management, archiving and open publishing as well as various trainings for early-stage researchers and PhD students. The library hosts and develops an institutional repository, [DSpace](#) of Comenius University Bratislava, which is open to all university staff and students. At this moment, a policy for open access, data management, and FAIR data is under development.

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Open Science training for researchers and staff plays an essential role within the services offered by partners which we turn to in the next section.

Skills and knowledge

Almost all ENLIGHT partner universities already offer some training on OS, and at two institutions training is currently under development (cf. Figure 5). These trainings most commonly target doctoral schools and early career researchers (seven to eight institutions). A slight majority (five institutions) is also already offering trainings for support staff and researchers more broadly across all career stages.

Open Science training at ENLIGHT institutions

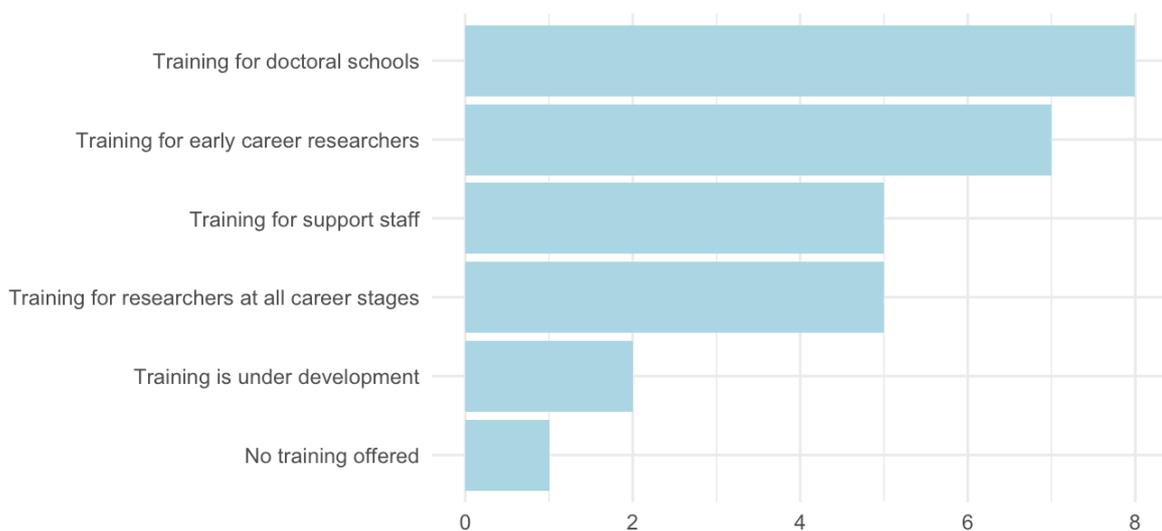


Figure 5. Open Science training by target groups at ENLIGHT institutions.

A wide range of OS training topics is offered or targeted (cf. Figure 6): the top three topics are RDM (including FAIR data, data sharing), legal issues (e.g. IPR), and scholarly communication / Open Access. Furthermore, good practices related to research (research integrity and reproducibility), data skills and the evaluation of research (responsible research assessment) feature prominently among training topics.

Several topics were mentioned in terms of possible training topics in the ENLIGHT network:

- OS basics: how to implement it, benefits to diverse stakeholder (e.g. citizens, civil society, end users),
- research assessment: disciplinary differences (hard sciences vs. social sciences and humanities), responsible research assessment (including impact metrics)
- research data management: how to implement FAIR data, data management plans, tools, infrastructure services (e.g. DARIAH),
- data skills: basic skills (e.g. creating/collecting, processing), sharing,
- research reproducibility,

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- scholarly communication: OA publishing,
- legal and ethical issues.

Open Science training topics

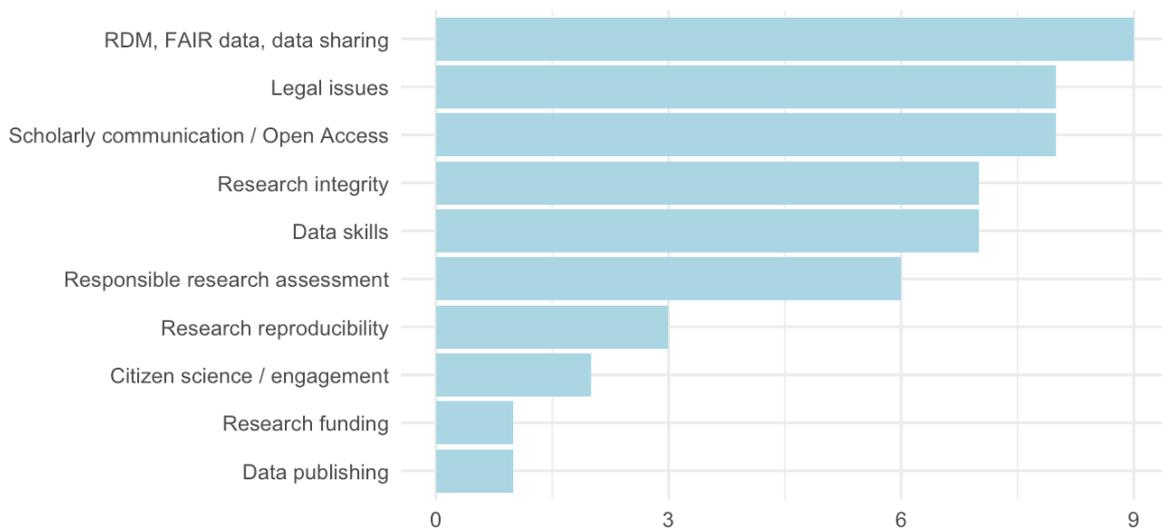


Figure 6. Open Science training topics as currently offered at ENLIGHT institutions.

Communities and ambassadors

Some ENLIGHT partners indicated that they are aware of different types of OS communities which address different needs or interests at their institution, ranging from disciplinary groups (e.g. ReproducibilityTea, a journal club) to cross-disciplinary communities (mentioned by three institutions) to data and software focussed groups (e.g. RLadies, Carpentries, HackyHour). So far, only one institution (University of Groningen) has established a network of OS ambassadors that raises awareness and promotes good OS practices.

Further partners have indicated that they would like to get started on supporting OS communities at their institutions, and would like to leverage on other partners' experiences.

While this was not the main focus of the survey, a few activities which successfully promoted OS were briefly mentioned, e.g. a knowledge café event and an annual Open Scholarship event.

Policies and their implementation

Open Science policies are targeted through a variety of approaches (cf. Figure 7), ranging from stand-alone policies to comprehensive policies, complemented by creating links or integrating elements of Open Science into other related policies (e.g. research integrity) and/or the overall university strategy.

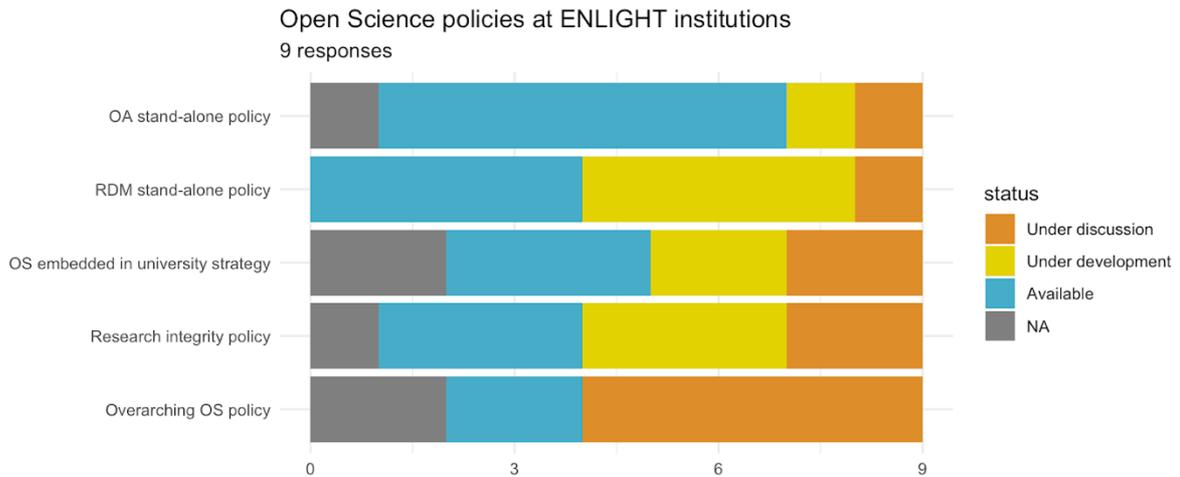


Figure 7. Open Science policies at ENLIGHT institutions by development status.

Not surprisingly, ENLIGHT partners most commonly have established a stand-alone Open Access policy: Six institutions have a policy in place, one under development, and one under discussion. This is followed by establishing a similar policy for data management, while such a policy is still in the development or discussion phase for five out of nine partners.

When it comes to Open Access elements in Open Science policies to deposit publications in an institutional repository feature most prominently (cf. Figure 8), followed by a recommendation to use open licenses. Regarding OA publishing, encouragement and support seem to be provided for both publishing in OA journals as well in the form of OA books (four institutions indicated that these elements are present in their policy). An institutional OA fund is mentioned by 1/3 of all partner universities.

RDM elements that are most frequently mentioned are encouragement and support for RDM and data sharing, and responsible RDM in line with the FAIR principles (indicated by four institutions). A little less prominent are obligations to create and maintain DMPs (selected by three institutions).

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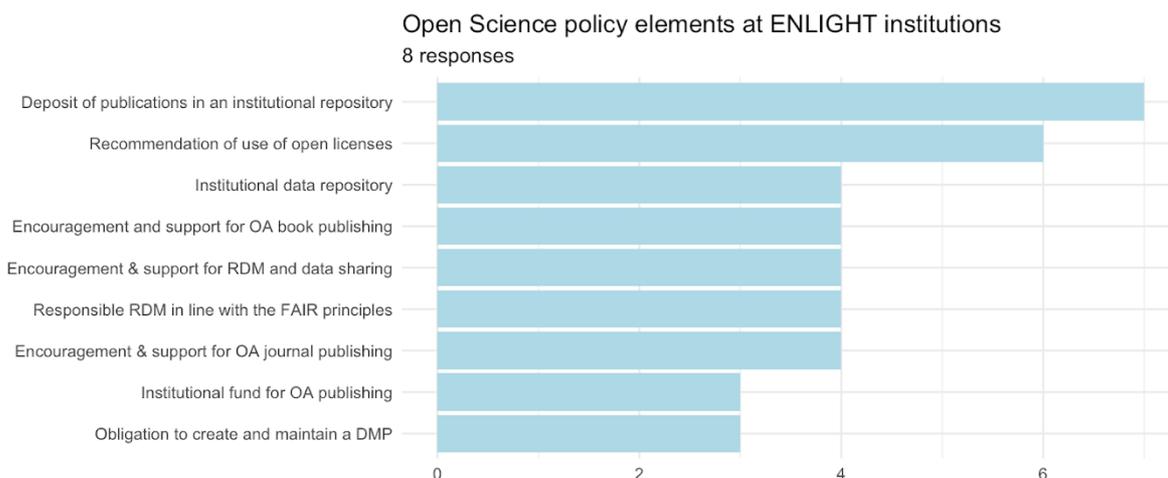


Figure 8. Open Science policy elements as currently in place at ENLIGHT institutions.

Five partners provided references to policies that have been established at their institutions, ranging from a fully-fledged Open Science, stand-alone policies for Open Access and research management respectively, research integrity policies and the embedding of Open Science into the university strategy. Further information was provided during the writing of this report.

In the following we summarize the policies which have been established so far, further policies are under development or under discussion as already noted above (cf. Figure 7).

Brief summary of the policies

University of Tartu (UT): *The Estonian Code of Conduct for Research Integrity* (2017) supports knowledge about, acceptance and entrenchment of research integrity in the Estonian research community. The Code describes the conduct expected from researchers and the responsibility of research institutions in ensuring research integrity, thus contributing to the increase of credibility of research in the eyes of the individual and the public. The aim is to increase awareness about the principles of research integrity, to monitor the research environment and, if necessary, to interfere and to deal with cases of misconduct. It contains the main values of research integrity such as freedom of research, responsibility, honesty and objectivity, respect and caring, justice, openness and cooperation. Also, it contains principles of action to monitor the research environment and, if necessary, interfere, and that follow the values of research integrity (principles by which conduct of research should be guided, taking into account the complexities of different research environments.) The principles of research integrity give instructions on how to make choices in research so that they would not harm the reliability of the researcher, the research institution or research as a whole.

National University of Ireland Galway (NUI Galway): The NUI Galway Open Science related policies are informed by the institution's strategic [Open NUI Galway](#) value. The University's [Research Integrity Policy](#) commits NUI Galway to a robust approach and outlines the principles of good research practice and integrity of research. The [NUI Galway library's policies](#) support Open Science practices. It contains regulations regarding [Open Access](#) to Research Outputs (to ensure open access to the University's

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research outputs), [data protection policy](#) and a [Research Data Management policy](#) (Includes advise on responsibilities with regard to data collected/stored as part of a research project which NUI Galway staff/students are engaged, the supports that are available, and to ensure that research data is managed in line with data protection regulations).

We expect further policy changes in light of the [Irish National Open Research Forum](#) that currently is working on a [National Action Plan](#) which will inform future policy developments in areas like Open Access Publishing, RDM and Responsible Metrics. Discussions are also happening on a policy to support Open Education.

University of Göttingen (UGOE): With its OA policy (University of Göttingen 2016), UGOE pursues the objective of its scientists and scholars as widely accessible and usable as possible and promotes OA for scientific publications while giving due consideration to disciplinary publication cultures and the author's individual career stage. When concluding publishing agreements, authors should not assign any exclusive rights of use, and they should explicitly secure at least simple rights of use for dissemination in OA and provide a copy of their publication via [GRO.publications](#), the institutional publication management system (the institutional OA repository GoeScholar mentioned in the policy was integrated by the end of 2021). The university recommends the choice of publication licenses that support OA (e.g. Creative Commons). In addition, UGOE operates an OA publication fund (managed by SUB Göttingen) and Göttingen University Press.

Via its research data policy (University of Göttingen 2014), UGOE promotes and supports free access to research data, the re-use, reproducibility, and quality assurance of all research data that underlie scientific results (with regard to ethical, data protection and copyright or confidentiality concerns in RDM). Project leaders and independent researchers are obliged to ensure compliance with good scientific practice and professional standards. The University advises on RDM in research projects from the planning stage, through implementation, and beyond the end of the project, and provides appropriate training and continuing education. Digital research data shall be stored and archived in the university's IT and information infrastructure (e.g. [GRO.data](#), not mentioned in the policy) or in recognized external or internal subject repositories. In the event of a transfer of subsequent use or publication rights, it should be ensured, that the data remain freely available for scientific purposes. People engaged in research at UGOE shall maintain the fundamental principles of academic integrity (University of Göttingen 2021). They shall be responsible for implementing or observing the fundamental values and standards of research work, in particular the rules of good research, this includes compliance with the recognised rules of authorship, maintenance of strict integrity with regard to the contributions of other persons, in particular academic cooperation partners, doctoral candidates, researchers from other facilities in the respective field of research, and former researchers, respect for the intellectual property of others, in compliance with the rules of citation, complete and correct evidence of one's own and other's preliminary work, consistent and self-critical assessment of one's own results, comprehensible and complete documentation of the research process and results, including compliance with the provisions for securing and storing primary data, allowing and encouraging critical discourse within the research community, disclosure of conflicts of interest in connection with research projects and peer reviews, consideration of ethical aspects and legal requirements.

Ghent University (UGent): Ghent University is committed to [supporting Open Science](#) and strives for policy, infrastructure, and guidance fostering the Open Science attitude of its research community. Signing DORA, the San Francisco Declaration on Research Assessment is a result of that policy. The university views [RDM as an integral part of good research practice](#). Research data are valuable scientific output that should be made available for the verification of research and for reuse where possible. However, (temporary) restrictions on access to research data may be necessary, e.g. to protect personal or otherwise confidential data, or to seek protection of research results under intellectual property rights. Ghent University considers RDM as a shared responsibility. Researchers are expected to comply with relevant legal and other external obligations, write a data management plan, adequately document research data, securely store and process data during the research process, preserve relevant data and accompanying documentation for a minimum of five years after completion of the research project/project funding, or after publication, provide access to data within UGent for scientific integrity review, and share them more widely where possible.

At Ghent University an immediate deposit / optional Open Access (ID/OA) mandate was adopted as of publication year 2010. Only publications with full text are accepted in the academic bibliography. If possible, the text is made available in open access. As of publication year 2023 a new publication and open access policy will go into effect, containing, amongst others, default open access to journal articles.

Ghent University is actively involved in the support of the European Commission's Open Science policies through her partnership in [OpenAIRE](#) - Open Access Infrastructure for Research in Europe. OpenAIRE's mission is to shift scholarly communication towards openness and transparency and facilitate innovative ways to communicate and monitor research. Furthermore, Ghent University is a member of [EOSC Association](#) and partner in several EOSC related projects with the aim to support the transition to a highly interoperable research environment.

University of Bordeaux (UBx): The University of Bordeaux is committed to a global and resolute policy in the service of scientific advances and societal issues with a roadmap for OS. It is one of the pillars of the University of Bordeaux's strategy for 2025 (U25) and 2030 (U30). This strategic plan aims to rethink subscription models for digital resources, to strongly support new editorial modalities in favour of OA, to initiate and promote good practices in research data management, to be a stakeholder in citizen and participatory science, and to support all open science practices through appropriate training. The University addresses following categories: 1. Research data must be able to meet the FAIR principles in order to meet several challenges: innovation and collaboration, preservation and cost reduction, transparency, valorisation, and compliance with an obligation. 2. Support of the promotion of citizen and participatory science. One of the fundamental roles of a university is to train citizens, capable of reflecting on the major issues of the world in which they live. The University wants to transfer its research results to the citizen to help him/her in his/her reflection. 3. The University wants to ensure that everyone has access to the technical and methodological skills required for more open and transparent research. In addition, the issues of scientific integrity and reproducibility of research permeate these topics and are reflected in very different ways depending on the discipline. 4. Strengthen the dialogue within the institution and all the actors such as researchers and teachers, doctoral students, but also research support staff and students from all disciplines to accompany and raise awareness of the transition to open science and the challenges it poses. 5. As a research-intensive

institution, the University of Bordeaux pays particular attention to its international commitments and related initiatives when developing the strategy for OS.

University of Groningen (RUG): As mentioned earlier the RUG has the commitment to Open Science embedded in the [university strategic plan](#). Through the OS Program the RUG aims to realize a change towards a culture in which Open Science is an integral part of the UG's research, education, talent development and societal impact. The following procedures/policies are in place:

1. Open Access: The university adopted a green open access policy in 2017. The accepted manuscripts (or post-print) of peer-reviewed articles are asked to be deposited in Pure. All research output deposited in Pure is shown on the [RUG research database](#). Currently the policy is being updated, and will soon become available.

2. Research Data Management: The [RDM policy](#) of the RUG 2021 sets out in more detail University-wide principles of faculties, research institutes and researchers to comply with in relation to data management and the handling of research data. It is a general framework outlining basic principles and responsibilities for handling data that can be used for publishable or exploitable research, in relation to data collection, - storage, - curation and – access.

Furthermore, the RUG is actively involved on national level to further develop OS practices and actions towards creating policies in e.g., the National Programme Open Science ([NPOS](#)), as well as on an international level with e.g., of course the ENLIGHT RISE involvement as well as being an active member in [The Guild](#).

Comenius University (CU): As a research institution in accordance with its basic mission to develop and disseminate education through creative scientific research and with its long-term development plan, CU has decided to support the open access and open science initiative and adopt an information policy based on the principles set out below. The policy is in the final stages of development.

Main aims are as follows:

- to speed up exchange, increase accessibility and visibility of scientific data, information, and knowledge – implementation of Plan S,
- to support and provide open access to university research outputs, publications, and data (green OA through university repository, gold OA through journals and publishers),
- to encourage/ensure proper working processes related to the research lifecycle, including the creation and fulfillment of the data management plan, FAIR principles, documentation management, etc.
- to publish OA documents with the use of Creative Commons licenses (preferable BY, BY-NC, BY-NC-SA),
- monitor the fulfillment of the objectives of our information policy (number of published OA materials, number of items in institutional repository, etc).

University of the Basque Country (UPV/EHU): The University of the Basque Country considers it is convenient and necessary to have an *OA policy* that fosters the dissemination of its research production, and which promotes the accessibility, improves the visibility and enhances the impact of the research carried out in institution. For these reasons, and in compliance with the Spanish and

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European legal regulations, the University Governance Board made it official in 2017 to endorse the following engagements (University of the Basque Country 2017):

- I. The University of the Basque Country recommends to its teaching and research staff to deposit their academic and research publications in a digital format, into the institutional repository (ADDI).
- II. Doctoral students will deposit an electronic copy of their doctoral thesis in the repository, at most six months after their approval.
- III. Final Bachelor’s Degree and Final Master Projects will also be deposited in ADDI, as long as their authors agree and they are not subject to any confidentiality clause.
- IV. The deposit in the repository will not imply the exclusive transfer of exploitation rights of the work to the university.

Moreover, all partners were asked if they monitor compliance with the OS policies. Currently, monitoring seems to be restricted to selected areas, e.g. the monitoring of compliance with funder requirements (EC, national funders). In addition, it was mentioned that although web-based data management tools allow for the monitoring of compliance with the FAIR principles this may only be targeted at some institutes.

Regarding joint OS principles for the ENLIGHT alliance all partners were asked to select from a list which was primarily based on the recently published UNESCO Open Science Recommendations (UNESCO 2021) that outline a common definition, shared values, principles and standards for open science at the international level (UNESCO 2021). Further suggestions could be provided via a free text field. Three principles were supported by all partners (cf. Figure 9): To “Foster a culture of Open Science”, “Make research outputs FAIR and share data as openly as possible”, and to “Align incentives and reward good practices”.

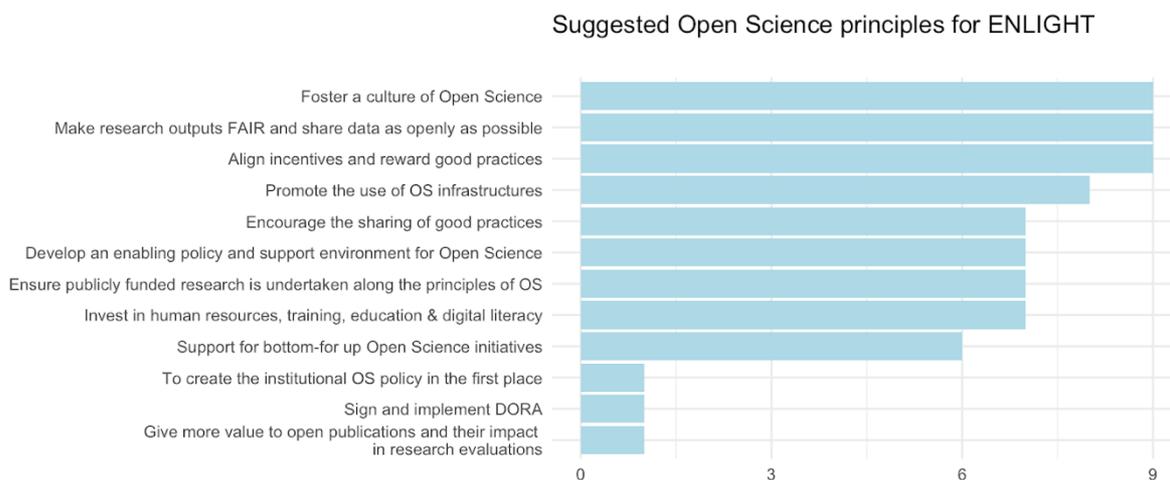


Figure 9. Suggestions on joint Open Science principles (several based on the UNESCO OS Recommendations).

Both institutional conditions as well as national, regional and European conditions and regulations can be helpful for implementing OS activities and support at the institutional level (cf. Figures 10 and 11).

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Institutional conditions in support of OS activities

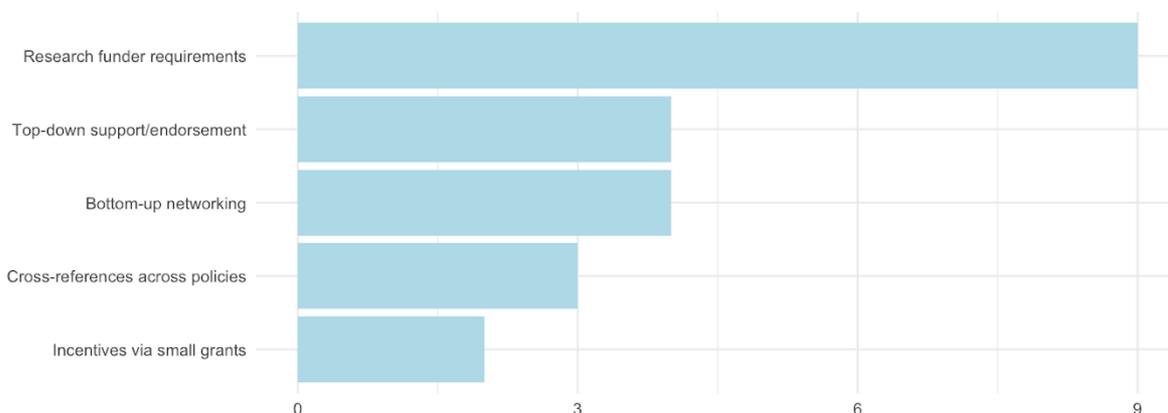


Figure 10. Institutional conditions that are perceived as helpful for implementing Open Science activities and support at ENLIGHT institutions.

Unsurprisingly, research funder requirements are viewed by all responding partners to have a supporting role for Open Science activities at the institutional level. This is due to the leading role funders have played over the last two decades when it comes to establishing OA and RDM requirements.

National and European conditions in support of OS activities

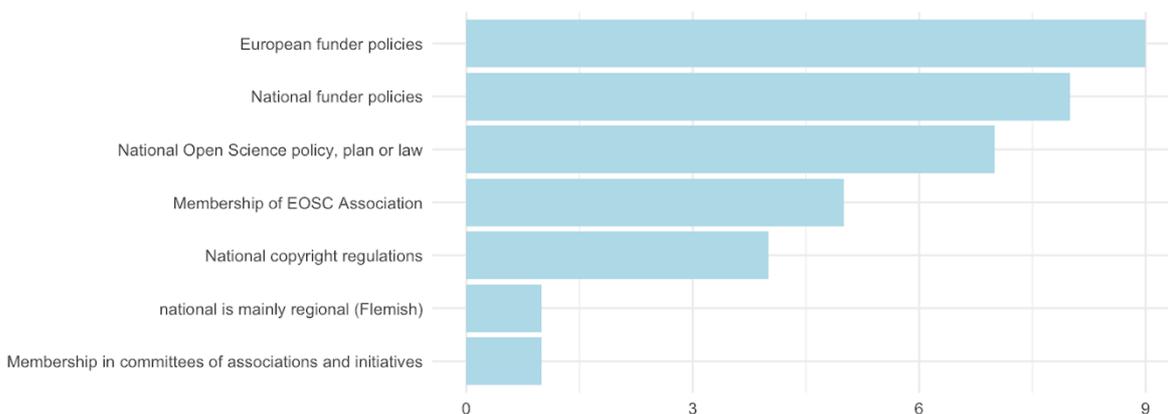


Figure 11. National and European conditions or regulations that are perceived as helpful for making progress on Open Science at ENLIGHT institutions.

Among responding ENLIGHT partners there was strong agreement on the top three national and European conditions in support of Open Science activities: European funder policies, national funder policies and national OS policies/plans or laws. Regarding the latter condition, it was not asked if such a condition is already in place, for some countries, this is certainly the case (e.g. OS plans for the Netherlands and France, National Framework on the Transition to an Open Research Environment for

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Ireland), for others only to a limited degree or with focus on specific aspects of OS (e.g. national copyright regulations that secure rights to deposit publications in OA after an embargo period) (German Act on Copyright and Related Rights, Taverne Amendment to the Dutch Copyright Act).

Finally, all ENLIGHT partners were asked to elaborate on what would help them most in their OS implementation efforts at their institution.

The following wishes and suggestions with regard to OS were expressed in the survey:

- A) With respect to reviewers and funding organizations:
 - OA publications and their quality should be a key component in the evaluation of research activities and a prerequisite for the awarding of funding.

- B) With respect to institutions:
 - Build good OS infrastructure and commit to establishing OS as part of scientific progress at national and institutional levels,
 - Further qualify university staff (legal issues, publication literacy, etc.),
 - Publish statistics on the use of open resources in teaching and research,
 - Improve promotion of OS in the institution; develop, share and promote services and infrastructures (e.g. ENLIGHT YouTube channel for OS) so that common OA standards emerge and become easier to use.

- C) With respect to researchers/academic staff/teachers:
 - Create incentives (outreach opportunity, merit, benefits in grant applications) to show that working in OS structures is beneficial and shall become a natural part of everyday academic practice and also is an opportunity to reach out to and educate civil society as well,
 - Emphasize positive impact of OS on academic careers, raise more OS awareness to break down existing academic habits and resistance to new working techniques.

Results from the survey on data management and FAIR data

In this section, we summarise further information on RDM, which was collected in November 2021 in advance of a FAIRsFAIR event at which ENLIGHT RISE's OS activities and plans were presented. We investigated in more detail the status of RDM policies at ENLIGHT institutions (cf. Figure 12) as well as if they cover core aspects such as FAIRness and data sharing (cf. Figures 13 and 14).

There were eleven responses to the survey on data management and FAIR data. In two instances, there were two responses, in these cases, the response which provided more detailed information was used. All respondent names were removed from the final dataset.

Currently, four ENLIGHT partner universities have established a research data management policy (RUG, UGent, UGOE, NUIG), for three universities such a policy is under development (cf. Figure 12).

We will use this information as a backdrop when considering what data infrastructures and services are already offered at ENLIGHT institutions although a policy might not be in place yet.

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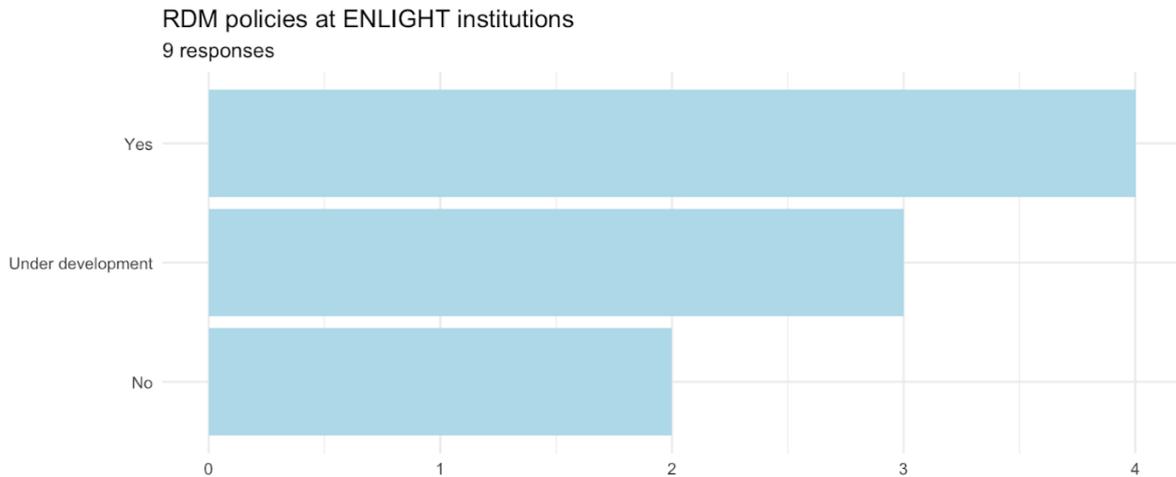


Figure 12. Research data management policies at ENLIGHT institutions.

Regarding the requirements in the data management policies there are several links to the FAIR principles (cf. Figure 13). However, currently only 1/3 of all partner institutions recommend that data are made FAIR, and one further institution indicated that the policy requirement align with the FAIR principles but do not explicitly mention FAIR.

Moreover, three institutions have reported that they will include the FAIR principles in the policy which is currently under development or a future revised version of their existing policy.

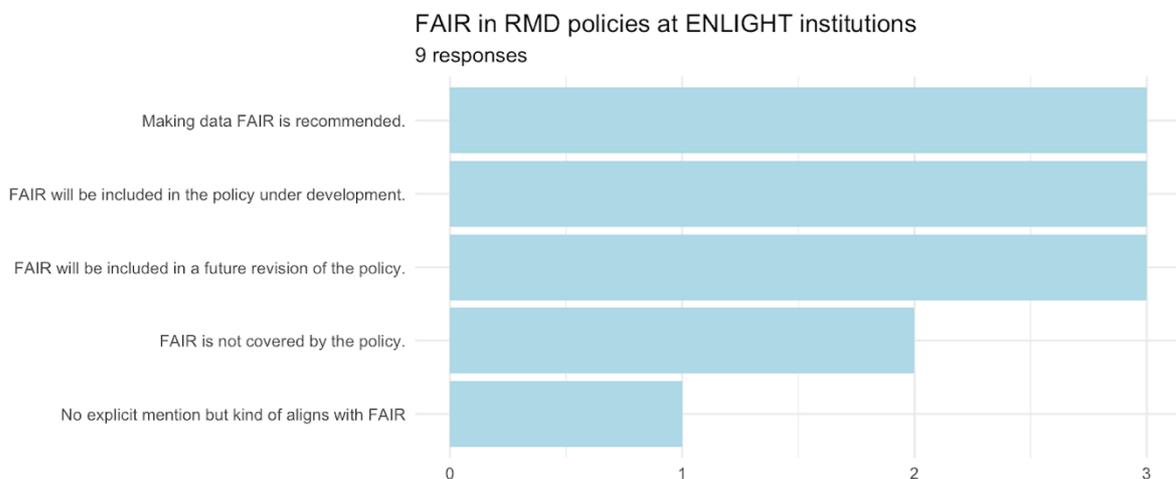


Figure 13. Status of integrating the FAIR principles into data management policies at ENLIGHT institutions

A further question targeted data sharing and open data. A majority of ENLIGHT institutions (five institutions) indicated that the “as open as possible as closed as necessary” principle (which was introduced by the European Commission with the introduction of the Open Data Pilot in Horizon 2020)

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is promoted in their data management policy. Moreover, again a majority (five institutions) encourages data sharing and 1/3 of all ENLIGHT institutions encourage OA to research data.

Via the “other” option one institution mentioned that also a reference on potential restrictions on sharing is present in the policy (cf. Figure 14). Such restrictions are very likely also mentioned in other partner’s policies (e.g. reference to data privacy regulations).

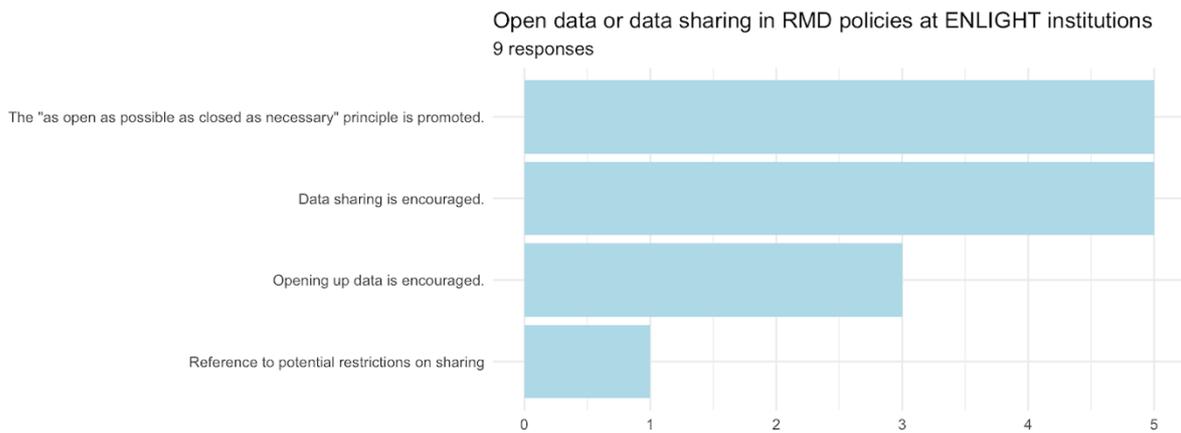


Figure 14. Statements on open data and data sharing in RDM policies at ENLIGHT institutions.

When it comes to data management services offered at ENLIGHT institutions it can be noted that several services are made available before a data management policy is released (cf. Figure 15). All ENLIGHT institutions already offer consultancy on data management. Furthermore, online information resources, an institutional data repository and training on data management are currently offered by 2/3 of all ENLIGHT partners (six institutions). Offering a persistent identifier (PID) service or a data management planning (DMP) platform seem to be slightly more popular among those who already have a policy in place or under development compared to those who do not have a policy (altogether five institutions).

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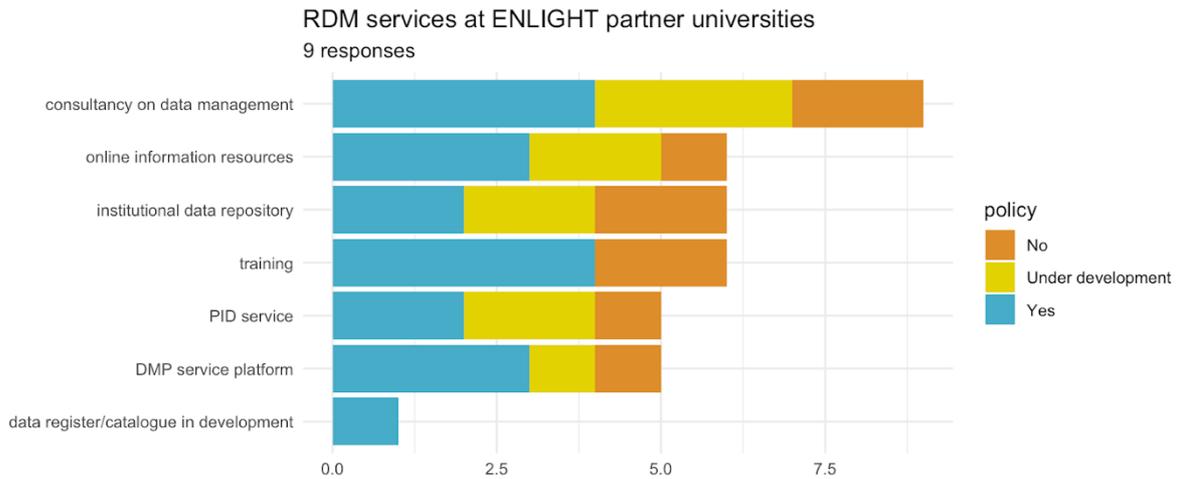


Figure 15. Research data management services as currently offered at ENLIGHT institutions.

ENLIGHT institutions engage in a range of additional actions in support of research data management (cf. Figure 16). Overall, seven institutions currently offer training sessions for researchers, and one institution indicated that such training is foreseen (via “other” option).

If a research data policy is already in place (4 institutions) the uptake of RDM actions seems slightly more pronounced, with a focus on training for researchers (4 institutions) and engagement in relevant national or international working groups (e.g. Research Data Alliance, LIBER) (3 out of 4 institutions). Every second institution that has a data policy in place also engages in training for data managers and data stewards. Much less engagement was reported in terms of embedding data managers or stewards in research projects (1 institution).

The development of training for researchers also seems to be a good starting point for additional actions for those institutions with a RDM policy under development (2 institutions) or those that do not have a policy (1 institution). Other institutions have chosen to engage in working groups even when a policy is not in place yet (1 institution) or to train data managers and data stewards while their policy is still under development (1 institution).

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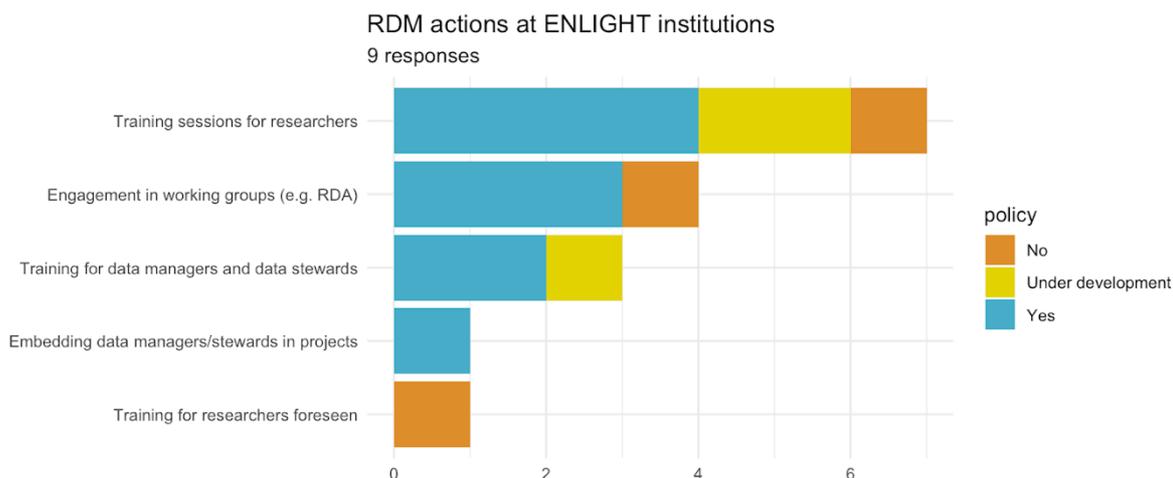


Figure 16. Actions in support of research data management at ENLIGHT institutions.

At the ENLIGHT partner institutions employees in different roles are in charge of research data support (cf. Figure 17). Seven institutions, out of which three have a data policy, report to have data managers/librarians whereas five institutions (again three of them with data policy) work with infrastructure engineers and managers. By now, data managers/librarians and infrastructure engineers and managers are the largest groups to be in charge of research data support. Only two institutions (both with data policy present) have a dedicated Data Steward who ensures high data quality and integrity. One institution indicated plans for training librarians enabling them to step into research data support roles.

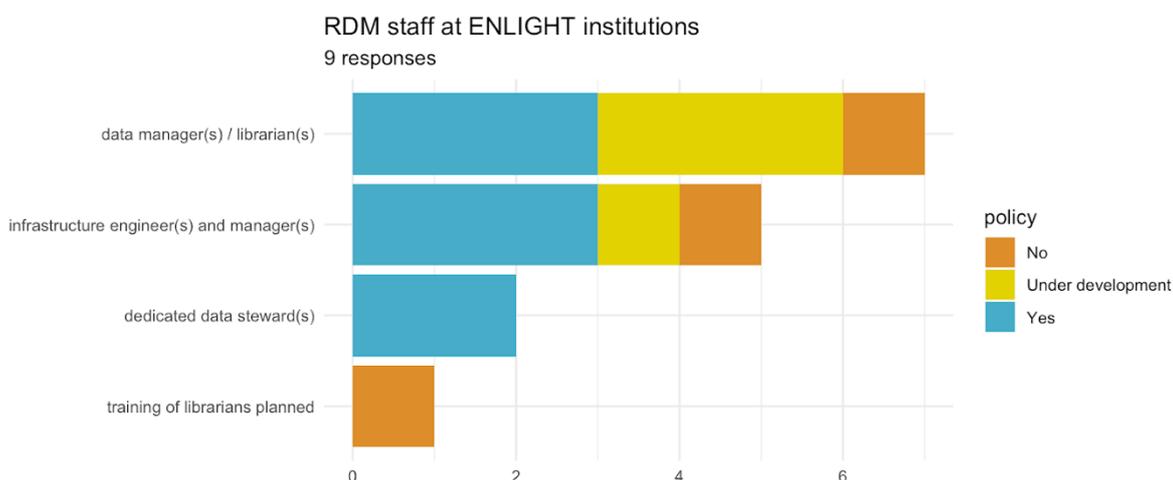


Figure 17. Staff in charge of research data support at ENLIGHT institutions.

Discussion & Outlook

The initial surveys on OS and FAIR data across the ENLIGHT alliance have revealed a good deal of information on current activities and wishes in terms of further information exchange and collaboration on good practices (e.g. experiences with establishing OS communities, methodologies in teaching OS skills, challenges related OA publishing).

The ENLIGHT RISE consortium provides a unique opportunity to network and raise awareness around OS. Partners can bootstrap their own institutional OS activities and include ENLIGHT members. At the same time, WP7 members will discuss and identify OS topics and webinars to engage participants.

This survey should therefore be seen as the first iteration. It will be useful to re-run the survey in two years to monitor joint activities and progress.

Next steps of engaging ENLIGHT partners with OS topics are to:

- Strengthen the link between OS-related work in ENLIGHT RISE (digital infrastructures, EOSC, public engagement, human resources and career development).
- Develop joint *Open Science Principles for ENLIGHT* and seek endorsement by the ENLIGHT Project Board and the university leaderships.
- Promote endorsement of the recently published *Diamond OA Action Plan* (Ancion et al. 2022).

An update of this deliverable will be published at the end of the ENLIGHT RISE project, which will report on collaborative actions and progress made in the different areas.

References

- Ancion, Z., Borrell-Damián, L., Mounier, P., Rooryck, J., & Saenen, B. (2022). *Action Plan for Diamond Open Access*. <https://doi.org/10.5281/ZENODO.6282403>
- Bibliothèques de Université de Bordeaux: Science ouverte: l'engagement de l'université. Available from: <https://bibliotheques.u-bordeaux.fr/Soutien-a-la-recherche/Science-ouverte-l-engagement-de-l-universite2>
- *Estonian Code of Conduct for Research Integrity*. (2017). Available from: <https://www.eetika.ee/en/ethics-estonia/estonian-code-conduct-research-integrity>
- FOSTER (2018). *Open Science Training Handbook*. Available from: https://open-science-training-handbook.github.io/Open-Science-Training-Handbook_EN/. Archived version as of April 2018, Zenodo, <https://doi.org/10.5281>
- French Ministry for Higher Education, Research and Innovation (2021). *Second French Plan for Open Science 2021-2024*. Available from: <https://www.ouvri.lascience.fr/second-national-plan-for-open-science/>
- German Act on Copyright and Related Rights. English translation available from: https://www.gesetze-im-internet.de/englisch_urhg/englisch_urhg.html
- Ghent University: "Open Science at Ghent University". Available from <https://www.ugent.be/en/research/research-strategy/open-science.htm>
- Ghent University: "Ghent University policy. Ghent University policy framework on RDM". Available from <https://www.ugent.be/en/research/datamanagement/policies/ghent-university.htm>
- Ghent University: (Re)search Tips, Open Access to your publications (here also the UGent Immediate Deposit, optional Open Access (ID/OA) mandate). Available from <https://onderzoektips.ugent.be/en/tips/00001291/>
- Morais, R., Saenen, B., Garbuglia, F., Berghmans, S., & Gaillard, V. (2021). *From principles to practices: Open Science at Europe's universities. 2020-2021 EUA Open Science Survey results*. Zenodo. <https://doi.org/10.5281/zenodo.5062982>
- National Open Research Forum Ireland. (2020). *National Framework on the Transition to an Open Research Environment*. Available from: <https://doi.org/10.7486/DRI.0287DJ04D>
- National Action Plan for Open Research [in Ireland]. (April 2022). Available from <https://norf.ie/index.php/2022/04/04/norf-action-plan-consultation/>
- Nosek, B. (2019). *Strategy for Culture Change*. Center for Open Science Blog. 11 June 2019. Available from: <https://www.cos.io/blog/strategy-for-culture-change>
- Taverne Amendment to the Dutch Copyright Act. Open-access.nl summary available from: <https://www.openaccess.nl/en/events/amendment-to-copyright-act>
- UNESCO (2021). UNESCO Recommendation on Open Science. <https://unesdoc.unesco.org/ark:/48223/pf0000379949.locale=en>
- University of Göttingen (2021). *Rules of the University of Göttingen Governing the Safeguarding of Good Research Practice*. Available from: https://www.uni-goettingen.de/de/document/download/96a9fc79d548ffc2e90e32628a7a1c08-en.pdf/RulesGoodScientificPractice_24.11.2021_en.pdf
- University of Göttingen (2016). *Open-Access-Leitlinie der Universität Göttingen*. In: Amtliche Mitteilungen der Georg-August-Universität Göttingen, no. 65, 6 December 2016, p. 1895-

1896. Available from: <https://www.uni-goettingen.de/de/document/download/35276f46a7d847913bba168149f44047.pdf/AM%20%202016Nr.65.pdf>
- University of Göttingen (2014). *Research data policy of the Georg-August University Göttingen (Forschungsdaten-Leitlinie der Universität Göttingen)*. In: Amtliche Mitteilungen der Georg-August-Universität Göttingen, no. 65, 6 December 2016, p. 1893-1894. Available from: <https://www.uni-goettingen.de/de/document/download/35276f46a7d847913bba168149f44047.pdf/AM%20%202016Nr.65.pdf>. English version available from: <https://www.uni-goettingen.de/en/488918.html>
 - University of Groningen (2021). *Strategic Plan 2021-2026*. Available from: <https://www.rug.nl/about-ug/policy-and-strategy/strategic-plan>
 - University of Groningen (2021). *Open Access procedure*. Available from: <https://www.rug.nl/about-ug/organization/rules-and-regulations/onderzoek/open-access-procedure-regeling-openbaarmaking-korte-publicaties-rug-medewerkers>
 - University of Groningen (2017). *Open Access Policy*. Available from: <https://www.rug.nl/library/open-access/faq/faq-oa-general/policy> (under revision).
 - University of Groningen (2021). *Research data policy*. Available from: <https://www.rug.nl/research/research-data-management/policy/ug-rdm/>
 - University of the Basque Country (2017). *Institutional Policy of the University of the Basque Country/Euskal Herriko Unibertsitatea on Open Access*. Available from: <https://www.ehu.es/es/web/biblioteca/pol%C3%ADtica-institucional-y-marco-legal>
 - van Wezenbeek, W. J. S. M., Touwen, H. J. J., Versteeg, A. M. C., & van Wesenbeeck, A. (2017). Nationaal plan open science. <https://doi.org/10.4233/uuid:9e9fa82e-06c1-4d0d-9e20-5620259a6c65>
 - Vicente-Saez, R., & Martinez-Fuentes, C. (2018). Open Science now: A systematic literature review for an integrated definition. *Journal of Business Research*, 88, 428–436. <https://doi.org/10.1016/j.jbusres.2017.12.043>
 - University of the Basque Country UPV/EHU (2017) *Open Access policy*. Available from: <https://www.ehu.es/es/web/biblioteca/pol%C3%ADtica-institucional-y-marco-legal>

Appendix: Survey questionnaires

Survey questionnaire on Open Science

Version: 14 December 2021

Editors: Najla Rettberg, Birgit Schmidt

ENLIGHT RISE - Focus on Open Science

****Survey on Open Science practices across the ENLIGHT RISE network****

This questionnaire is targeted at identified members across the ENLIGHT RISE network who are actively implementing Open Science activities at your university (e.g library, research office, data services). One person per university should respond, we encourage you to draw on colleagues' support to answer certain questions.

The purpose of this survey is to:

- Map current Open Science (OS), Open Access (OA) and research data management (RDM) activities
- Explore common strengths, priorities, gaps, and attitudes towards OS
- Gather input to a shared OS vision for the ENLIGHT alliance.

This survey consists of 8 sections and is expected to take 20 minutes of your time. Deadline: 20 January 2022

The information collected in this form will be treated confidentially and not shared further. You can save versions and return to the survey later.

* Required

Your Name *

What is your function? *

Library Personnel
International Office
Research Support
Data Services
Other:

Please select your university *

Drop-down menu
UNIVERSITE DE BORDEAUX
UNIVERSITEIT GENT

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UNIVERZITA KOMENSKEHO V BRATISLAVE
UNIVERSIDAD DEL PAIS VASCO/ EUSKAL HERRIKO UNIBERTSITATEA
NATIONAL UNIVERSITY OF IRELAND GALWAY
GEORG-AUGUST-UNIVERSITÄT GÖTTINGENSTIFTUNG ÖFFENTLICHEN RECHTS
RIJKSUNIVERSITEIT GRONINGEN
TARTU ULIKOOL
UPPSALA UNIVERSITET

Your assessment of Open Science activity areas

How would you assess the current level of engagement (from your perspective as an implementor) of the following Open Science elements in your institution?

Likert scale: 0 = No activity, 1 = Very low, 2 = Low, 3 = Average, 4 = High, 5 = Very high

- **Open Access to publications** (e.g. Mentioned at policy level, implemented by staff to a high degree, and support service available to support staff in Open Access publishing = Very high) *
- **FAIR data and data sharing** (e.g. Mentioned at policy level, implemented by staff to a high degree, and support service available to support staff in making and sharing FAIR data = Very high) *
- **Open Science education and skills** (e.g. University units offer Open Science workshops for staff, there is a bottom-up Open Science Community present, and the university has a support service for staff that needs help in applying Open Science practices = High) *
- **Open Education** (e.g. Mentioned at policy level, Open Educational Resources (OER) are widely used in curricula, and support service available for staff implementing OER in their teaching = Very high) *
- **Societal Participation and Citizen Science** (e.g. Mentioned at policy level, implemented by staff to a high degree, and support service available to support staff in Societal Participation and Citizen Science = Very high) *

For which of the above areas do you see opportunities to strengthen it through collaboration with ENLIGHT RISE partners, and how? Please be as specific as possible.

Free text

Your assessment of Infrastructures and Support

Which scholarly services do researchers have access to at your organisation?

Multiple choice chart with 3 levels

Levels:

Available

Under development

Under discussion

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Publications repository
Data Repository
Institutional fund for OA publishing of articles and books
OA publishing platform (e.g. journals, books)
RDM /FAIR support and advice services
Data management plan (DMP) service
Persistent identifier services and integration (ORCID, DOIs, other)
Support services for legal issues (IPR, GDPR, Copyright)
Data Registries
University Press

Your assessment of Skills and Knowledge

What training on Open Science does your institution currently offer? *

Multiple choice

Training for support staff
Training for early career researchers
Training for researchers at all career stages
Training for doctoral schools
Training is under development
No training offered
Other:

What topics are covered in your trainings? *

Multiple choice

Scholarly communication (Open Access, preprints, etc.)
Research data management and sharing (incl. FAIR)
Research integrity
Responsible research assessment (incl. impact metrics)
Citizen engagement, societal participation, Citizen Science
Legal issues (IPR, licensing, etc.)
Data skills (creating/collecting, processing, etc.)
Research reproducibility
Other:

What topics could be covered by the ENLIGHT RISE network in training events?

Free text

Community

Are there any Open Science community activities at your institution? *

Multiple choice

Disciplinary Open Science groups (e.g. ReproducibiliTea)
Open Science Community (across disciplines)

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Data and software groups (e.g. Rladies, Carpentries, HackyHour)
Network of ambassadors (e.g. Open Science, Open Access or Data Champions)
Other:

What activities have been successful?

Free text

ENLIGHT RISE will establish a network of Open Science Ambassadors. We are looking for university researchers/teachers who are enthusiastic and outspoken supporters of Open Science principles.

Can you share any potential names from your institution?

Free text

Policy

What kind of Open Science policy/strategy/roadmap is in place at your university?

Multiple choice chart with 3 levels

Levels:

Available

Under development

Under discussion

Open Access policy (stand-alone)

Data management policy (stand-alone)

Open Science policy (overarching)

Research integrity policy (with elements on OS embedded, e.g. data management)

University strategy (elements on OS embedded)

If the policy(ies) is(are) published, please provide link(s) here:

Free text

Please specify the elements of your institution's policy(ies) on Open Science: *

Multiple choice

Deposit of publications in an institutional repository

Institutional fund for OA publishing

Encouragement and support for OA book publishing

Encouragement and support for OA journal publishing (e.g. institutional journal hosting)

Recommendation of use of open licenses

Encouragement and support for data management and data sharing

Responsible management of research data in line with the FAIR principles

Institutional data repository

Obligation to create and maintain a data management plan

Other:

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Do you have a mechanism in place for monitoring compliance with your (or funders') OS policy? *

Single choice

Yes

No

Don't know

Other:

Which of the following principles should be included in potential joint ENLIGHT RISE OS statement? *

*

Multiple choice

Foster a culture of Open Science, align incentives and reward good practices

Make research outputs FAIR and share data as openly as possible.

Ensure publicly funded research is undertaken along the principles of Open Science

Develop an enabling policy and support environment for Open Science

Support for bottom-for up Open Science initiatives

Investing in human resources, training, education, digital literacy and capacity building for open science

Establish, invest, promote the use of OS infrastructures

Encourage the sharing of good practices, successes and potential pitfalls

Other: [Free text]

Recognition and Rewards

Rewards and Recognition: What approaches have you already established or tested at your institution? *

Multiple choice

Open Science constitutes a criterion in research assessment

Hiring procedures include requests for information on Open Science engagement

Special funds or awards for OS activities

Open Science is part of the staff review process

None of the above

Other:

Environment

What institutional conditions support you currently in developing your Open Science activities? *

Multiple choice

Cross-references across policies (e.g to research integrity policies)

Incentives via small grants

Top-down support/endorsement

Bottom-up networking

Research funder requirements

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Other:

What national or European conditions or regulations assist you in making progress in your Open Science activities? *

Multiple choice

National copyright regulations (e.g. Taverne agreement, German copyright clause, Belgium Open Access copyright law)

National Open Science policy, plan or law

National funder policies

European funder policies (e.g. European Commission, ERC)

Membership of EOSC Association

Other:

If you could have a wish, what would help you most in helping to implement Open Science at your institution?

Free text

-- end of questionnaire --

Survey questionnaire on data management and FAIR data

Version: 11 November 2021

Editors: Birgit Schmidt, Najla Rettberg

ENLIGHT Focus on FAIR

This mini survey collects information on your institution's data management support activities, and in particular for making FAIR data a reality.

Please note that a more comprehensive survey covering Open Science more broadly is currently under development.

In case you have any questions please contact the UGOE team (bschmidt@sub.uni-goettingen.de).

Your institution*

U Bordeaux

U Gent

NUI Galway

Comenius University

UPV/EHU

RUG

U Tartu

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U Göttingen

U Uppsala

Contact person

Free text

Does your institution have a research data policy?*

Single choice

Yes

No

Under development

If applicable, please provide the URL of your institutional data policy

Free text

Does the policy include a statement on data sharing and/or open data?

Multiple choice

Data sharing is encouraged.

Opening up data is encouraged.

The "as open as possible as closed as necessary" principle is promoted.

Other

Does the policy include a statement on FAIR data?

Multiple choice

Making data FAIR is mandatory.

Making data FAIR is recommended.

FAIR is not covered by the policy.

FAIR will be included in the policy under development.

FAIR will be included in a future revision of the policy.

Other

Which research data services are offered at your institution?*

Multiple choice

consultancy on data management (e.g. funder requirements, DMPs)

institutional data repository

DMP service platform (creation, hosting of DMPs)

PID service

training (e.g. RDM, infrastructures, tools)

online information resources

Other

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What data management staff roles are currently in place at your institution?*

Multiple choice

data managers (e.g. research data managers, data librarians)

dedicated data stewards (implementation and liaison role, directly linked to or embedded in a department/project)

infrastructure engineers and managers (e.g. data repository developer)

Other

What actions are currently taken for fostering skills and capacities for RDM and making data FAIR?*

Multiple choice

Training sessions for researchers

Training for data managers and data stewards

Embedding data managers/stewards in projects

Engagement in working groups (e.g. RDA)

Other

What are currently your main challenges related to implementing FAIR?

Free text

-- end of questionnaire --