

EUTOPIA - Towards a best practices report for Open Science

V1

Release 27/07/2020

Cite

Univerza v Ljubljani, Vrije Universiteit Brussel, CY Cergy Paris Université, Göteborgs universitet, Universitat Pompeu Fabra, University of Warwick. *EUTOPIA – Towards a best practices report for Open Science. 2020. DOI or URL [pending]*

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Versioning and contribution history

Version	Date	Authors	Notes
DRAFT	18/06/2020	UPF	Draft structure
DRAFT-v1	04/07/2020	VUB, UL, UoW	Integration of comments and feedbacks
V1	27/07/2020	UPF	Added executive summary

Institutional Abbreviations

Univerza v Ljubljani	UL
Vrije Universiteit Brussel	VUB
CY Cergy Paris Université	CY
Göteborgs universitet	GU
Universitat Pompeu Fabra	UPF
University of Warwick	UoW

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Executive summary

<u>EUTOPIA</u>, formed by Univerza v Ljubljani, Vrije Universiteit Brussel, CY Cergy Paris Université, Göteborgs Universitet, Universitat Pompeu Fabra and the University of Warwick, is one of the winning alliances in the 2019 Erasmus+ "European Universities Initiative" competitive call. The aim of the EUTOPIA project is to create a connected, inclusive, open community, and this includes the advancement of Open Science, which is dealt with in WP3. This report is an overview of the state of affairs of all the elements of Open Science at the six member universities and is (the foundation of) one of the expected outputs in SubWP3.4.

The report summarizes the results of an internal survey with eight sections, 247 questions and a comprehensive glossary about policies and strategies, research integrity, infrastructures, researcher visibility, training and human resources related to Open Science (in general), Open Access, Research Data, Alternative Metrics, and Open Evaluation, Citizen Science, Open Educational Resources and Open Data. The survey was drawn up at UPF and sent to EUTOPIA partners for feedback from 26 February 2020 until 13 March 2020.

National or regional policies and good practices for Open Science, Open Access, Research Data and Open Data are common, and so are institution-level policies in Open Science, Open Access, Research Data and Open Data. In contrast, no university has a current strategy for h Citizen Science. Finally, all six universities report that there exists a policy or a similar instrument on research integrity at the national/regional level and five universities indicate that they have one or more ethics committees.

No partner has a clear estimation of the overall costs related to Open Science research and activities and only two universities report that they implement some kind of incentive to improve Open Science practices. One university reported that they had signed the Berlin Declaration.

Related to infrastructure, all six universities have an Open Access repository developed with different platforms/software, three universities indicate that they have a Research Data repository and, finally, only one university reports having an Open Educational Resources repository and an Open Data repository (although it is the same infrastructure used for Open Access and Research Data). Also, four universities report that they know the costs of development and maintenance of all the OS infrastructure, but only one details the annual costs.

To maximize the visibility of researchers, four universities report having an expert finder/Open CRIS and four universities report having a global common policy for the persistent identification of researchers.

Regarding staff, there are many committees, working groups or coordinators/leaders related to Open Science activities. In addition, Open Access and Research Data activities stand out as involving more staff than the other areas. The institutions offer a big range of courses with

a broad variety of people attending training and, particularly, young researchers stand out as a target audience.

The survey allows a diagnosis of the situation in the different areas of open science and has uncovered the strengths and weaknesses of the institutions in these areas. For this reason, three lines of work are proposed:

1. A shared Open Science policy which can then be locally adapted to each of the EUTOPIA universities

2. Training materials on Open Science for young researchers

3. A strategy to promote the use and production of Open Educational Resources

1. Introduction

<u>EUTOPIA</u> is an alliance of six leading European universities with the aim of creating a connected, inclusive community. Through collaborative research, greater student and teacher mobility and shared innovations, among others, Eutopia seeks to address local and global challenges ultimately contributing to creating a new model for higher education in Europe.

In June 2019, EUTOPIA was chosen as one of the 17 winning projects in the Erasmus+ "European Universities Initiative" competitive call, launched by the European Commission in order to build a European Education Area.

EUTOPIA is formed by the the following universities: Univerza v Ljubljani, Vrije Universiteit Brussel, CY Cergy Paris Université, Göteborgs Universitet, Universitat Pompeu Fabra and University of Warwick.

The EUTOPIA project includes seven work packages, each focusing on a different domain. Within work package WP3, entitled 'Integrating and Opening Research, Innovation and Knowledge Creation in EUTOPIA, SubWP3.4 is devoted to the advancement of Open Science and includes as its first output a 'Report sharing best practices on Open Data and Open Educational Resources'. It was deemed useful to have, as a starting point, an overview of the state of affairs of all of the elements of Open Science at the six member universities. To obtain this information, a thorough survey was designed and sent out to be completed by the relevant units in each university. This report presents the results of this survey.

The questions in the survey related to the following items: Open Science (in general), Open Access, Research Data, Alternative Metrics and Open Evaluation, Citizen Science, Open Educational Resources and Open Data. The ensuing analysis of the answers provided has helped identify strengths and weaknesses and establish lines of work that will contribute to progress in Open Science within the framework of the EUTOPIA alliance.

1.1 Background

The survey consists of eight sections, 247 questions and a comprehensive glossary to ensure sameness of interpretation. The survey, which runs on SurveyMonkey, was drawn up by UPF, as SubWP lead, and sent to all EUTOPIA member universities on 26 February 2020. The deadline for responding was 13 March 2020. Having initially processed the results, it became clear that additional information was needed on some of the items in the survey, so a message with specific requests for additional information was sent to each EUTOPIA member on 27 April 2020.

1.2 Survey question availability

The survey questions are available in the **Appendix: list of survey questions** to this report. All answers can be found in the document: EUTOPIA BEST PRACTICES FOR OPEN SCIENCE: Responses.

This draft report and the document with the all the answers to the survey is available at the Eutopia Ljubljana Sharepoint. The final version of the report will eventually also be available

through Eutopia's open documentation repository/platform (to be implemented). [Pending - Decide where to deposit all the public documents generated by EUTOPIA]

2. Outcomes per section & question

2.1 General information

Information about the university, the name, position and contact details of the person who answers the survey, the persons responsible for issues related to Open Science, as well as the policy makers related to these matters.

2.2 Policies and strategies

Information on policies and best practices at national/regional and institutional levels; also, on Citizen Science strategies, endorsement of Open Science declarations, Funding and Incentives.

National or regional policies and good practices

Four universities (VUB, CY, GU, UPF) report that there are overarching policies or best practices in **Open Science** at the national/regional level and two (UL, UoW) report that there are none. The policies reported by CY¹, GU² and UPF³ are of national scope while the policy at VUB⁴ is regional. All have been developed and implemented recently. The oldest dates from 2016 (GU), two date from 2018 (CY, UPF) and one from 2020 (VUB).

The existence of **Open Access** policies is generalised, since all six universities (UL, VUB, CY, GU, UPF and UoW) responded that there are national policies in place. If ordered chronologically, we can see that the first one dates from 2011 (UPF⁵) followed by 2012 (VUB⁶), 2013 (UoW⁷), 2015 (UL⁸), and finally, 2016 (CY⁹, GU¹⁰). As a distinguishing factor, VUB indicates that the national policy is a declaration and, in addition, there is a decree¹¹ for the Wallonia-Brussels Federation and UoW adds that in addition to the national policy, the UK also has a specific OS policy for research assessment¹².

¹ Law for a digital republic (2016) and <u>National Plan for Open Science</u> (2018)

² Government proposition Prop. 2016/17:50 (2016)

³ <u>The universities' commitments before Open Science</u> (2019)

⁴ Open Science beleid voor Vlaanderen (2020)

⁵ Law 14/2011 of 1 June, on Science, Technology and Innovation

⁶ The Brussels declaration

⁷ RCUK Open Access policy

⁸ National Strategy of Open Access to Scientific Publications and Research Data in Slovenia 2015–2020 (2015)

⁹ Law for a digital republic (2016)

¹⁰ Government proposition Prop. 2016/17:50

¹¹ Project de décret. Visant à l'établissement d'une politique de libre accès aux publications scientifiques (Open Access) (2018)

¹² Open Access policy for REF2021: The Research Excellence Framework (2016)



Figure 1. National or regional policies and good practices

Regarding **Research Data**, four universities (VUB, CY, GU and UoW,) state that there is a national/regional-level policy and two that there is none (UL, UPF). CY, GU and UoW report national-level policies, whereas VUB reports a regional-level policy.

No universities report a national/regional policy on **Alternative Metrics and Open Evaluation**.

Regarding **Citizen Science**, only two universities (VUB, GU) report a national/regional policy. The Flemish Government¹³ implemented one in 2019, and the Consortium of Swedish universities¹⁴ is developing one, which is due for publication in 2020.

In the area of **Open Educational Resources**, no university states that it has a policy but UL reports a code of good practice, in the form of VideoLectures.Net portal with videos of conferences from around the world under a CC-BY-SA 3.0 licence.

Finally, regarding national policies on **Open Data**, all universities (UL, VUB, CY, GU, UPF and UoW) respond affirmatively. Of these, UL, CY, GU and UoW report national-level policies and

¹³ https://www.scivil.be/

¹⁴ https://medborgarforskning.se/

VUB and UPF policies of regional scope. UoW reports one single policy that covers both Research Data and for Open Data.

Institutional policies, mandates, etc.

At the institutional level, none of the institutions reports that it has an overaching **Open Science** policy. Only one university (CY) reports that it is developing one.

As for **Open Access**, three universities (VUB, UPF¹⁵ and UoW¹⁶) have an institutional policy and one institution (CY) provides incentives. The first to publish its policy was UPF in 2011 recommending that its faculty should deposit its academic and scientific publications in the Institutional Repository; VUB and UoW require submitting a copy to the CRIS system and the Institutional Repository, respectively.



Figure 2. Institutional policies and good practices

Two universities (VUB, UoW) report that they have a **Research Data** policy and one university (CY) reports that it is developing one. UoW's dates from 2011 and aims "to ensure that data produced or otherwise used through the University's research activities is registered, stored, made accessible for use and reuse as appropriate, managed over time and/or disposed of, according to legal, ethical, funder requirements and good practice". VUB's dates from 2018

¹⁵ Pompeu Fabra University institutional policy to promote open access to scientific output

¹⁶ Warwick Open Access (OA) Policy

and "outlines the responsibilities of all parties concerned, from the university to the researchers themselves".

One university (UoW) reports that the University's Executive Board has just approved a policy on **Alternative Metrics and Open Evaluation** policy and they are currently developing a work plan.

No universities have policies on **Citizen Science** and **Open Educational Resources**. Finally, when it comes to **Open Data**, four universities (VUB, CY, UPF¹⁷ and UoW) report they have institutional policies. Both VUB's and UoW's policies are based on the European Commission's 'as open as possible, as closed as necessary' general policy.

Citizen Science strategy

Currently, no university has a Citizen Science strategy. Only UoW reports that it is being developed.

Despite not having a policy, four universities (VUB, GU, UPF and UoW) report that they carry out Citizen Science activities. Although the spectrum of disciplines covered is broad, two clusters may be identified: one revolves around technology, biomedicine and natural sciences and the other around the digital humanities.

Following this trend, the use of makerspaces/fab labs is very widespread, since four universities (VUB¹⁸, CY, GU and UPF) report that they have specific spaces, and one university (UoW) reports that it has a number of departments and facilities to undertake such activities.

Endorsement declarations

Regarding the declarations signed by the universities, only one (UPF) reports that it has signed the <u>Berlin Declaration</u>. One university (UoW) mentions that its institutional policies have introduced contents from these declarations.

Funding

When ascertaining the cost of Open Science, four universities (CY, GU, UPF and UoW) report they know the costs of article processing charges (APC), three universities (UL, UPF and UoW) report they know the licensing agreement costs, whereas only one (UoW) controls, in addition, the costs of training and awareness-raising activities.

¹⁷ Regulation implementing legislation on Transparency and the right to access public information at Pompeu Fabra University

¹⁸ URL is not accessible to persons outside VUB



Figure 3. Knowledge of the cost of Open Science

However, none of the universities have a clear estimation of the overall costs related to Open Science research and activities.

Incentives

With regard to incentives, only two universities (CY, UPF) have reported that they implement some kind of incentive to improve Open Science practices. While CY regularly informs researchers about Open Science and can provide human resources to support them in Open Science, UPF reports that "at present funds given to research groups and units for miscellaneous research-related expenses can be used to cover APCs and it is working on integrating Open Science/Open Access practices into career path assessment".

2.3 Research integrity

Information on Code of conduct for Research Integrity and Ethics Committees.

Code of conduct

All six universities (UL, VUB, CY, GU, UPF and UoW) have reported that there exists a policy or a similar instrument on research integrity at national/regional level. VUB reports that <u>The Belgian Science Policy Office</u> (BELSPO) "published an ethics code for scientific research in Belgium in 2009". CY has the <u>Signature of the Charter of Ethics for Research Professions</u> (2015). GU indicates that Sweden has a <u>Good Research Practice</u> (first issued in 2011) "which functions as a national orientation, offering an overview of relevant legislation and ethical

requirements and recommendations". In addition, there are up to five agencies¹⁹ that seek to ensure research integrity. UPF has reported that there is a national declaration²⁰ that "establishes a series of ethical principles and professional responsibilities relating to research activity". At legislative level, they are also governed by different laws²¹ and decrees²². Finally, UoW reports a "revised concordat to support research integrity, published in October 2019, which is an updated version of the first concordat to support research integrity" (2012).

All six universities (UL, VUB, CY, GU, UPF and UoW) report that they have a policy or a similar instrument on research integrity at institutional level. With regard to UL, it reported that it has the Code of Ethics for Researchers at the University of Liubliana (2014) "that sets ethical behaviour standards to guide teachers, researchers and doctoral students when ethical issues arise". VUB has the Charter for researchers, which "was adopted by the Research Council in 2019 and describes the VUB's principles for research integrity and good academic practices". CY has the Scientific Integrity Referent in 2018 and, within the framework of HRS4R a consultation group on Ethical and Professional Aspects has been set up. GU reports administrative procedures²³ for suspected cases of deviations from good research practice. Also "ongoing on certification in relation to the EU standards of HR Excellence in Research Award. In addition to the usual Swedish ethical assessment of research involving humans, a yearly assessment is required for NIH-funded projects and this assessment²⁴ is conducted by the Committee for Continuing Ethical Review and handled by the Sahlgrenska Academy Office". UPF has the Code of Good Scientific Practice of the centres of the Barcelona Biomedical Research Park (PRBB), which includes UPF's Department of Health and Life Sciences. "The aim is to create an environment conducive to high-quality research and prevent problems from arising in relation to the integrity of scientists in their work". It also counts on the Human Resources Strategy for Researchers and the Pompeu Fabra University Code of Ethics. And finally, UoW reports that it has the Research Code of Practice "that provides guiding principles and standards of good practice in research across all subject disciplines and fields of study in the University".

In answer to the question as to whether the researchers funded/employed make a formal commitment to research integrity, four universities (UL, VUB, CY and UoW) answered affirmatively. UL reports that by signing the Statement of Commitment to Respect University of Ljubljana Codes of Ethics, the researcher acknowledges and commits himself/herself to observe the ethical principles of the Code of Ethics of the University of Ljubljana, Code of Ethics for researchers at the University of Ljubljana, and other ethical principles regarding their field of research. VUB reports that researchers are required to be aware of and abide by the Charter (an appendix to the regulations that cover researchers, and to the regulations for doctoral researchers), and to ensure that those for whom they are responsible are also aware of and abide by the Charter. CY reports that at present they have a commitment formula for graduate students, which during 2020 will be extended to all researchers of the university. Finally, UoW states that it is the researchers themselves that are responsible for "adhering to the principles of Excellence, Integrity, Honesty and Openness, Co-operation, Accountability

¹⁹ Swedish Ethical

²⁰ National declaration on Scientific Integrity

²¹ Law 14/2011, of 1 June, on science, technology and innovation

²² Royal Decree 103/2019, of 1 March, approving the Statute of predoctoral research staff in training

²³ https://medarbetarportalen.gu.se/aktuellt/nyheterdetalj//DownloadAsset.action?contentId=1124226&languageId=100000&assetKey=Handl%C3%A4ggningsordning+misst%C3 %A4nkt+oredlighet+november+2015 [No funciona. Demanar link correcte]

²⁴ Procedures for awarded research projects and applications to federal US funding agencies, especially the National Institutes of Health (NIH)

and Safety set out in the Research Code of Practice" and that misconduct may be grounds for instigating disciplinary proceedings.

All of the above information on research integrity can be found on the various websites of the six universities (UL²⁵, VUB²⁶, CY²⁷, GU²⁸, UPF²⁹ and UoW³⁰). In general, the information provided is at central level with university-wide coverage, although there is one university (GU) which provides the information on a decentralized basis by faculties, and another (UPF) which combines the two options (UPF³¹). Finally, VUB has reported that in addition to the information available on its website, it also offers information via the intranet.

Ethics committees

Five universities (UL, VUB, GU, UPF and UoW) have indicated that they have one or more ethics committees.

UL reports that it has two ethics committees³² at university level and five at faculty³³ level. At University level: Committee for ethical issues and Ethical committee on research involving human subjects. At UL member faculties: Ethical committee at the Faculty of Social Work, Faculty of Sport – Ethical committee on the field of sport, Faculty of Arts – Ethical Committee, Ethical committee of the Faculty of Education, Committee for Ethics in Research at the Faculty of Social Sciences

VUB states that it has several ethics committees: the Committee for Medical Ethics (applies Belgian federal legislation for medical experiments involving humans), The Ethics Committee for Human Sciences (provides advice on ethics for non-medical experiments involving humans), The Ethics Committee for Animal Experiments (applies Belgian federal law regarding experiments involving animals), The Ethics Committee Dual Use, Military Research and Misuse of Research (provides support in obtaining export licences for research with (potential) military applications; provides advice on ethics for research that could be used to harm people, animals, the environment or plants), Contact Point Access and Benefit Sharing (provides support for compliance with the Nagoya Protocol on Access and Benefit Sharing) and the Data Protection Office (provides support for compliance with the General Data Protection Regulation).

GU reports that "at the medical faculty, Sahlgrenska Academy, there is a local council for research ethics, with the duties to raise awareness, encourage debate and encourage development of knowledge, support the faculty's management in connection with issues relating to research ethics, and assist in the planning of research ethics training at all levels".

UPF reports four ethics committees: the Institutional Committee for Ethical Review of Projects (assesses ethical and data protection compliance of research projects involving human subjects in the social sciences and the humanities and in computer science and engineering);

²⁵ Ethics in research at the University of Ljubljana

²⁶ Legal and Ethics Office

²⁷ La mission Intégrité scientifique

²⁸ Forskaretik och forskningsetik

²⁹ Responsible research and innovation (RRI)

³⁰ Research Integrity

³¹ Code of Conduct for Research Integrity for UPF's Department of Health and Life Sciences

³² Committee for ethical issues and Ethical committee on research involving human subjects

³³ Ethical committee at the Faculty of Social Work, Faculty of Sport – Ethical committee on the field of sport, Faculty of Arts – Ethical Committee and Ethical committee of the Faculty of Education

Drug Research Ethical Committee (assesses ethical and data protection compliance of research projects involving human subjects in health and life sciences, especially those involving clinical analysis and the use of drugs); Ethical Committee for Animal Research (assesses ethical and data protection compliance of research projects involving animals, especially in health and life sciences), and the Committee for the integrity of research and good scientific practice (develops strategies that encourage research to adhere to the PRBB Code of Good Scientific Practice; ensures that researchers and research support staff are well trained in good scientific practice; designs and reviews protocols for the investigation of possible cases of scientific malpractice; analyses possible cases of scientific malpractice).

UoW discloses that it has a Research Governance and Ethics Committee (RGAEC), and its sub-committees³⁴ ensure the appropriate ethical review of research and continue to develop policies and guidance to facilitate the protection of the University's research participants.

2.4 Infrastructures

Information on the infrastructures available at the universities regarding the Open Access repository, the Research Data repository, the Open Educational Resources repository, the Open Data repository, the CRIS, and their costs.

Open Access repository

All six universities (UL³⁵, VUB³⁶, CY³⁷, GU³⁸, UPF³⁹ and UoW⁴⁰) have an Open Access repository developed with different platforms/software. In this regard, there are two universities (GU, UPF) that use open source <u>DSpace</u> software, one university (UoW) that uses open source <u>EPrints</u> software, two universities (UL, CY) that use specific software that is used for research nationally, and finally one university (VUB) that uses the commercial platform/software <u>Pure</u>.

With regard to the metadata used in each of these repositories, the Dublin Core metadata schema prevails in four universities (UL, GU, UPF and UoW). In addition, UoW also uses the DataCite and RIOXX metadata schemas and Ljubljana uses COMARC. Finally, VUB uses the CERIF standard.

Regarding the number of documents and the number of metadata only documents, this varies greatly across the different universities. If we look at the number of documents we find: 92,000 at UL, 4,562 at VUB, 14,653 at CY, 224,049 at GU⁴¹, 20,120 at UPF and 93,833 at UoW. However, in terms of number metadata only documents we find: 48,900 at UL, 125,274 at VUB, 9,814 at CY, 180,000 at GU, 0 at UPF and 72,531 at UoW.

³⁴ Biomedical & Scientific Research Ethics Committee (BSREC), Humanities & Social Sciences Research Ethics Committee (HSSREC), Animal Welfare & Ethical Review Body (AWERB), Ministry of Defence Research Ethics Committee (MoDREC) and Social Care Research Ethics Committee (SCREC)

³⁵ Repozitorij Univerze v Ljubljani

³⁶ Institutional Repository (VUBIR)

³⁷ HAL Université - Paris Seine

³⁸ Göteborgs Universitets Publikationer (GUP) and GUPEA

³⁹ UPF e-Repository

⁴⁰ University of Warwick open access research repository

⁴¹ Includes data of GUP and GUPEA



Figure 4. Number of documents in repository

As for the type of content, most commonly found document types in the repositories are research papers (56%), followed by master's degree papers and other academic works (24%), then to a lesser extent reports (9%) and theses and dissertations (8%) and, finally, other material (3%) including institutional documents.



Figure 5. Open Access repositories: types of content

In general, Eutopia universities report no restrictions on the documents, although one university (UL) discloses that only peer-reviewed versions of papers are accepted and another (UPF) has reported that sample exams are only for community members.

The Open Access repository provides metrics at five universities (UL, VUB, CY, UPF and UoW). Of the available metrics, article-level metrics stand out for three universities (UL, CY, UoW) where they record the number of hits per record (CY), Dimensions (VUB), Scopus (UoW) or number of views of the landing page and number of file downloads. In respect of journal-level metrics, VUB indicates that it provides Impact Factor (IF), Eigenfactor and Scientific Journal Rankings (SJR) and, finally, UPF indicates that it provides downloads and visits, and UL the number of records per faculty or academy, most viewed and downloaded publications, yearly statistics of views and downloads for faculty or academy.

Regarding altmetrics, only two universities (CY and UoW) offer the Altmetric.com product.

With respect to quality attributes, two features are covered. One, certification as a trustworthy repository, is reported by only one university (CY), which stipulates that the repository has been certified by the Centre National de la Recherche Scientifique (CNRS). The other is whether the requirements of the <u>OpenAIRE</u>⁴² project are met; four universities (UL, CY, GU and UPF) report they are and indicate that their research outcomes are available on the portal.

Research Data repository

Three universities (UL, UPF and UoW) indicate that they have a Research Data repository. Two universities (UPF and UoW⁴³) report that it is the Open Access repository for documents, where data are also included; one university (UL), in contrast, indicates that it has a specific repository for data, although only social science data are included. Both at UPF and UoW, the number of records does not exceed 300, while there are around 600 at UL.

If data is included in the Open Access repository (UPF and UoW) the platform/software is of course the same: DSpace (UPF) and EPrints (UoW). The UL repository is implemented on a proprietary development called NESSTAR.

As for metadata, Dublin Core is used at the two universities (UPF, UoW) that have data in the Open Access repository, DataCite is used at one (UoW) and Data Documentation Initiative (DDI) at another (UL).

UPF and UoW have a 2GB limit for dataset files. Among other restrictions, UPF also states that "at least one author must be affiliated, data should not be restricted and should not contain any confidential intellectual or industrial property and data will be deposited in Open Access or embargoed for a maximum period of two years".

In general, no repository is a DOI provider, although there is one university (UoW) that states that the "Library is a member of CrossRef and can mint DOIs on an ad hoc basis as needed", and UPF is working on being able to provide DOIs along the same lines.

⁴² OpenAIRE "links research outcomes (e.g., publications, data, software) to their creators (e.g., researchers, institutions, funders), enabling discoverability, transparency, reproducibility and quality-assurance of research". Through its website, a large amount of research outcomes funded by public Europeans funds freely available to everyone can be accessed ⁴³ No distinction is made between research data and open data

Regarding adherence to the FAIR principles, one university responded affirmatively (UoW) and two indicate that they follow them partially (UL, UPF). However, only the repository at UL is certified with the <u>CoreTrustSeal</u>.

Open Educational Resources repository

Only one university (UPF) has reported having an Open Educational Resources repository. This repository is the same repository used for Open Access and Research Data and, therefore, they share software (DSpace) metadata schema (Dublin Core) and restrictions (files less than 2 GB).

The number of records is 80 and they are divided according to these types of content: presentation slides (67%), other material (30%), worksheets (2%) and syllabi (1%).

Open Data repository

Only one university (UoW) has reported having an Open Data repository, although it is the same infrastructure used for Open Access and Research Data (UoW handles Research Data and Open Data undistinguishably). Therefore, the attributes of the Open Data repository are: software (EPrints), metadata schemas (Dublin Core and DataCite), restrictions (files less than 2 GB), DOI assignment (not directly but the Library is a member of CrossRef and can mint DOIs on an ad hoc basis as needed), the monitoring of FAIR principles, and it is not certified with any seal.

Current Research Information System

Four universities (UL⁴⁴, VUB⁴⁵, CY and UPF⁴⁶) report having a CRIS (Current Research Information System) and, except CY's, all are available online to the general public.

Each uses a different platform/software: QUASAR at CY, Sigma Research at UPF, National CRIS with the national software at UL, and Elsevier's Pure at VUB.

Three universities (UL, VUB and UPF) report that their CRIS is CERIF compliant and all four universities (UL, VUB, CY and UPF) report that the CRIS is connected to the Open Access repository.

The CRIS provides metrics at three universities (UL, VUB and UPF). Of the available metrics, article-level metrics are recorded at two universities (UL, UPF) through WoS and Scopus Cites. In addition, UPF offers Google Scholar link and Scimago Index. Moreover, in the context of author-level metrics, only UPF indicates that it provides the H index. As for journal-level metrics, VUB and UPF offer Journal Impact Factor (IF) and CiteScore while VUB also includes Scopus Rating, SNIP, SJR and UPF includes CarhusPlus and MIAR. Regarding altmetrics, only two universities (UL, UPF) offer them. Both UL and UPF use the Altmetric.com product.

⁴⁴ SICRIS

⁴⁵ Vrije Universiteit Brussel Research Portal

⁴⁶ Scientific output at UPF



Figure 6. Metrics and altmetrics offered by CRIS

Regarding the use of the CRIS for evaluation processes, three universities (UL, VUB and UPF) respond affirmatively. At UL the CRIS is used to evaluate teachers, researchers and associates; at UPF for departments and researchers; and at VUB to extract CVs which are used during evaluation.

Costs

Four universities (UL, CY, UPF and UoW) report that they are aware of the cost of developing and maintaining all the infrastructure, but only CY details the annual costs. The others report that they have an estimate or know it partially because the repository is managed by thirdparty organizations receiving national funding.

2.5 Visibility of researchers

Information on persistent identification and expert finder systems.

Persistent identification

Four universities (UL, VUB, CY and UPF) report having a global common policy for the persistent identification of researchers. At UL and VUB, this policy is mandatory. UPF encourages all academic staff to have identifiers, but it is not mandatory.

The most widely used persistent identification system is ORCID, which is used at four universities (VUB, CY, UPF and UoW), followed by ScopusID, used at three universities (VUB, UPF and UoW). Google Scholar profile is used in only two universities (UPF, UoW) and WoS ResercherID/Publons at one (UPF). In addition to these international identifiers, we can see



that two universities also use national identifiers such as HESA ID at UoW and the National Researcher Code at UL.

Figure 7. Persistent identification systems supported by the universities

Expert finder

Four universities (VUB⁴⁷, GU, UPF⁴⁸ and UoW⁴⁹) report having an expert finder/Open CRIS. Three universities (VUB, UPF and UoW) report that it is an institutional portal which allows staff at the university to perform searches about their areas of expertise. Moreover, two universities (VUB⁵⁰ and UPF⁵¹) report that they have a website focusing on the regional sphere where the research done by various regional institutions is grouped together.

As for Scientific Social Network Sites, ResearchGate is used or promoted at UL, UPF and UoW, Twitter is used or promoted at CY, UPF and UoW, Academia.edu is used or promoted at UL and UPF. UPF also reports using or promoting Publons and LinkedIn.

Although universities use/promote Scientific Social Network Sites or have an expert finder/Open CRIS, none of the universities has a policy regarding these two issues.

⁴⁷ FRIS Research Portal

⁴⁸ Experts guide

⁴⁹ Warwick's Expert Directory

⁵⁰ All Flemish universities are obliged to send information regarding their researchers, their publications and projects

⁵¹ Research Portal of Catalonia

2.6 Training

Information on the type of training provided at partner universities on Open Science, Open Access, Research Data, Alternative metrics and/or Open Evaluation, Open Educational Resources, Open Data, CRIS platform, and Visibility of researchers.

Open Science

Three universities (VUB, CY and UPF) offer courses related to OS. They are provided either by the library (CY, UPF) or by a faculty member (VUB).

There is a broad variety of people attending training on Open Science but the group that is mentioned by all two universities (CY and UPF) is PhD students. Staff and faculty are reported as attendees by two universities (CY, UPF) and, finally, two universities (VUB, CY) reports that (bachelor's or master's degree) students attend them as well.

The three universities (VUB, CY and UPF) inform this training is part of the academic curriculum for PhD students; at UPF it is only for students of the PhD in Biomedicine.

Training is done face-to-face at the three universities (VUB, CY and UPF). In addition, one university (UPF) indicates that courses are also available online.

As for the issue of which aspects of Open Science is training most valued in, responses are heterogeneous. CY reports Open Science courses in general and courses on Publication; however, UPF points to Research data and Intellectual property.

CY indicates they miss having online presentations of Open Science challenges and UPF indicates they miss having Citizen Science and Open Educational Resources courses.

Open Access

All six universities (UL, VUB, CY, GU, UPF and UoW) offer courses related to OA. Training is usually provided by the library (UL, CY, GU, UPF and UoW) but also by the research office (VUB) or the Academic Departments (UL). At UoW training is provided by the Library in partnership with Organizational Development and the Doctoral College.

There is a broad variety of people attending training on Open Access, but the two groups that are mentioned by all six universities (UL, VUB, CY, GU, UPF and UoW) are Staff and PhD students. Five universities (UL, VUB, CY, UPF and UoW) report that they are also attended by faculty, three universities (CY, UPF, UoW) by (bachelor's or master's) students, and finally, one university (UoW) singles out professional services staff supporting researchers.

Three universities (VUB, CY and UPF) report that these courses are part of the academic curriculum. At CY, they are at master's and doctoral school level; at UPF they are in some cases, and at VUB, scholarly and communication literacy is part of doctoral training.

Training is done face-to-face at all six universities (UL, VUB, CY, GU, UPF and UoW). Online courses are available at three universities (VUB, UPF and UoW), tutorials at another three (UL, UPF and UoW), and printed materials at two universities (UPF, UoW). Finally, UPF also conducts courses via infographics, micro-MOOCs or open access week activities and, at UoW, they use videos.

As for the issue of which aspects of Open Access is training most valued in, three universities (VUB, GU and UPF) choose courses on the different ways to publish in open access. In this regard, VUB states that scholars still seem to appreciate basic literacy sessions.

Two universities (UL, UoW) indicate face-to-face training and also individual/tutorial instruction. Overall, the types of training in Open Access missing from universities are: online presentations, self-training online, tutorials, webinars and MOOCs.

Research Data

All six universities (UL, VUB, CY, GU, UPF and UoW) offer courses related to Research Data. Training is carried out most often by the library (CY, GU, UPF, UoW), but also by the Research Office (VUB, GU), IT Services (GU, UoW), or other specific services (such as Social Science Data Archives at UL).

There is a broad variety of people attending training on Research Data, but the two groups mentioned by all six universities (UL, VUB, CY, GU, UPF and UoW) are Staff and Faculty. Five universities (UL, VUB, CY, GU and UoW) report that they are also attended by PhD Students, and two universities (CY, UoW) report they are attended by (bachelor's or master's) students.

One university (UoW) states that there are specific courses for which the syllabus includes involvement in a major research project; in these cases, research data training is compulsory.

Training is done face-to-face at all six universities (UL, VUB, CY, GU, UPF and UoW). Online courses are available at two universities (VUB, UoW), also printed materials (VUB, UoW), and tutorials (UL, UoW). Finally, one university (UoW) indicates it also uses infographics.

As for the issue of which aspects of Research Data is training most valued in, three universities (VUB, GU and UPF) report it is courses related to Data Management Plans. Two universities (GU, UPF) have reported issues related to the publication of data and the handling of research data under GDPR.

Two universities (UL, UoW) report that face-to-face training and consultations are the most valued formats of trainings.

The type of training in Research Data that universities lack and miss includes: online presentation of Research Data challenges and legal aspects of Research Data management.

Alternative Metrics and/or Open Evaluation

Two universities (GU, UPF) offer courses related to Alternative metrics and/or Open Evaluation. In one case (GU) training is supplied by the communications unit and in another (UPF) by the library.

Training on Alternative Metrics and/or Open Evaluation is attended at these two universities (GU, UPF) by Staff. However, at one university (GU) they mainly target communication officers, but also researchers, and at another (UPF), they are also attended by Faculty.

At none of the universities are these courses part of the academic curriculum.

Training at GU and UPF is done online. UPF also uses the web page.

As for the issue of which aspects of Alternative Metrics or Open Evaluation is training most valued in, general information and comparative with traditional metrics stands out. However, general training in open evaluation is felt to be lacking.

Open Educational Resources

Two universities (GU, UoW) offer courses on Open Educational Resources (OER). In one case (GU) they are offered by the unit for pedagogical development and interactive learning, and in another (UoW), by the library.

Training in OER is attended at two universities (GU, UPF) by: Staff, Faculty and PhD Students. At one university (UoW) they are also attended by (bachelor's or master's) students.

Only UoW reports that training in OER is offered as part of the academic curriculum, namely a Medical Education course.

Training is conducted face-to-face at GU and UPF.

Face-to-face sessions, often held in very small groups, is the most valued type of training at UoW. There is a lack of comprehensive training in how to create OER using new authoring tools (GU).

Open Data

Three universities (VUB, CY and UoW) offer courses on Open data. They are provided by the library in two universities (CY, UoW) but also by the research office (VUB) and the IT service (UoW).

Training on Open Data is attended at these three universities (VUB, CY and UoW) by: Staff, Faculty and PhD Students. As for (bachelor's or master's) students, they are only offered to them at two universities (CY, UoW).

Training is done face-to-face at three universities (VUB, CY and UoW). Two universities (VUB, UoW) use both online courses and print materials. Finally, one university (UoW) reports that it also uses infographics, tutorials, consultations and workshops.

Consultations and workshops are the most valued type of training. And, moreover, online presentation of OD challenges, postgrad researcher training, supervisor training, hands-on training on how to publish FAIR open data and legal/tech transfer/RDM training to deal specifically with sensitive data are felt to be lacking.

CRIS

Two universities (VUB, UPF) offer courses on their CRIS. Training is provided by research office (VUB) or by the library (UPF).

Training on the CRIS is attended at these two universities (VUB, UPF) by: Staff and Faculty. They are available to PhD students only at VUB.

At none of the universities are these courses part of the academic curriculum.

Training is conducted face-to-face at these two universities (VUB, UPF). At UPF training is also done online, and at VUB print materials are used.

Generating a CV, editing scientific output data and face-to-face walk-throughs are areas in which training is most valued. Training on data exports and on reports is felt to be lacking.

Researcher visibility

Four universities (VUB, CY, GU and UPF) offer courses on researcher visibility. They are provided by the library (CY, UPF), the research office (VUB, CY), the Human Resources Department (VUB), or the communications unit (GU).

Training on Researcher Visibility is attended at three universities (VUB, CY and UPF) by: Staff, Faculty and PhD Students. It is also available to (bachelor's or master's) students, at one university (CY). One university (GU) mainly targets communication officers, but the courses are open also to researchers.

Three universities (VUB, CY and UPF) report that these courses are part of the academic curriculum. At UPF this applies to Biomedicine PhD students. At VUB, all PhD students receive credits if they partake in these kinds of sessions.

Training is done face-to-face at these four universities (VUB, CY, GU and UPF). At UPF training is also conducted online.

Among the most valued types of training are the Digital Identity Research Workshop, the classic sessions on speaking in public, and on writing of popularizing texts.

Training on academic social networks and specific kinds of communication (science comedy, podcast, workshops for children, etc.) are felt be lacking.

2.7 Human resources for Open Science

Information on the existence of Open Science Committees or working groups, coordinators or leaders or staff exclusively dedicated to Open Science.

Open Science Committees or working groups

Two universities (CY, UoW) report that they have an **overarching Open Science** working group. The working group at CY is known as the Research Support Service and is made up of Library and Research staff members. At UoW, the <u>Open Research Group</u> "aims to be the advisory body for the University regarding developments relating to Open Research and its relevance to the University's research and other scholarly interests; promote awareness and understanding of issues relating to Open Research; instigate, advise on and support Open Research-related initiatives and practices; make recommendations to Research Committees and other bodies as appropriate on relevant policy, services and requirements".

With respect to **Open Access**, three universities (CY, UPF and UoW) indicate that they have a Committee/Working Group and one (GU) indicates that these issues are being worked on in a distributed manner but there is no single committee or established working group. At CY Open Access is dealt with by the Research Support Service, already mentioned above in

connection to Open Science in general. At UPF the VR Research - Library Liaison group meets every other month to discuss the implementation and progress of open access resources and stimuli. At UoW, the Open Research Group, mentioned above in connection to Open Science in general, deals with Open Access issues, but the Library has an informal e-Repositories group as well, which brings together teams from across the Library to discuss technical issues, metadata, Open Access and other issues that relate to the operation of the Institutional Repositories.

Three universities (CY, GU, UoW) state that they have a Committee/Working Group on **Research Data**. At CY, Research Data issues, as is the case with other OS aspects, are handled by the Research Support Service. At GU the Research Data working group consists of representatives from the library, Research and Innovation office, IT, Archive, and legal department and it meets every three weeks to discuss the following topics: education, helpdesk (meta)data review, communication, network, and internal work. At UoW, the Research Data Management Action Group is a group of practitioners responsible for various parts of the research data lifecycle (Library, IT Services, Research Office, Digital Preservation, Information Security and others, as needed).

One university (CY) reports having a Committee/Working Group on **Alternative Metrics and Open Evaluation** and another university (UoW) informs there is a Working Group which has not been formally constituted. At CY the Working Group includes people from the Steering Service, Library and Research support staff. At UoW, the main aim of the yet to be formally constituted committee is to develop the implementation plan for the new responsible research evaluation policy.

One university (GU) reports that it has a Committee/Working Group on **Citizen Science**: <u>ARCS</u> (Arenas for co-operation through citizen science). One university (UoW) reports that it has a Committee/Working group for **Open Educational Resources (OER)**: the PIL-unit, which includes three staff members and the student union, are working on OER awareness raising.

Finally, three universities (CY, GU, UoW) report that they have a committee/working group for **Open Data**, although in all three cases the committees/working groups cover other OS topics as well. At CY the relevant body is the already mentioned Research Support Service. At GU it is the Research Data working group and at UoW it is also the Research Data Management Action Group.

Coordinator or leader for Open Science

This section contains information about the existence of coordinators/leaders for different aspects of Open Science.

Three universities (CY, UPF and UoW) report having an overarching coordinator/leader for **Open Science**. Five universities (UL, VUB, CY, UPF and UoW) have a coordinator/leader for **Open Access**. Three universities (CY, UPF and UoW) have a coordinator/leader for **Research Data**. Only one university (CY) reports having a coordinator/leader for **Alternative Metrics and Open Evaluation**, and the same is true for Citizen Science and Open Educational Resources (UPF). Finally, two universities (CY, UPF) report they have a coordinator/leader for **Open Data**.

Open Science staff

Staff is employed for **Open Science** activities at three universities (VUB, CY and UPF). The people involved in this type of activity are librarians at two universities (CY, UPF), IT staff at one university (UPF), the research officer (VUB) and the responsible research and innovation office (UPF). The departments responsible are the libraries at two universities (CY, UPF) and the research office at one (VUB).



Figure 8. Staff (in terms of full-time equivalent)

Staff is employed for **Open Access** activities at five universities (VUB, CY, GU, UPF and UoW) and one (UL) does not provide specific information on this point. The people involved in this type of activity are librarians at six universities (UL, VUB, CY, GU, UPF and UoW), the research officer at one (VUB) and IT staff at one university (UPF). Hence, the departments responsible are the libraries at five universities (UL, CY, GU, UPF and UoW) and the research office at one (VUB).

Staff is employed for **Research Data** activities at six universities (UL, VUB, CY, GU, UPF and UoW). The people involved in this type of activity are librarians at four universities (CY, GU, UPF and UoW), IT staff at two (GU, UPF), the research officer at two (VUB, GU), the data archivist also in one (UL), and the legal department and the university archive at one (GU). The departments responsible are the libraries at four universities (CY, GU, UPF and UoW), the research office at one (VUB) and the academic department (UoW).

Staff is employed for **Alternative Metrics and Open Evaluation** at two universities (CY, UPF). The people involved in this type of activity are librarians at both universities (CY, UPF) and IT staff at one (UPF). The departments responsible are the libraries at these two universities (CY, UPF) and the steering staff at one (CY).

Staff is employed for **Citizen Science** activities at two universities (GU, UPF). The people involved in this type of activity are IT staff at one university (GU) and non-academic staff at another (UPF). As for the departments responsible, only one university (UPF) has provided relevant information (the RRI Liaison).

Staff is employed for **Open Educational Resources** at two universities (GU⁵², UPF). The people involved in this type of activity are librarians at one university (UPF), the PIL-unit, which supports Open Educational Resources, at another (GU). UPF reports the participation also of audiovisual support staff and interns. The departments responsible are the Unit for Pedagogical Development and Interactive Learning at CY and the Web Services and the Training Innovation Services at UPF.

Staff is employed for **Open Data** activities at one university (UPF). The people involved in providing this type of activity are librarians at two universities (CY, GU), IT staff at two (CY, GU), the research officer at one (GU), the legal advisor and archival staff at one (GU), and data analysis and prospective studies staff at another (UPF). The departments responsible are: the library and IT Services at one university (CY), and the Prospective Studies and Quality Unit at another (UPF).

2.8 Open Science priorities

Information on the current priorities reported by four of the Eutopia universities (UL, VUB, CY, UPF). No priorities reported by the other two universities.

Responses indicate that current priorities concerning Open Science concentrate in five main themes: Open Access, Research Data, Alternative Metrics and Open Evaluation, Training, and Policy.

Concerns and efforts in **Open Access** are mainly in the promotion of mandatory deposit of research outputs in institutional repositories and in working towards the implementation of transformative agreements with publishers that align with the requirements of <u>Plan S</u>.

The unanimous priority with respect to **Research Data** is the availability of an adequate infrastructure to deposit data according to FAIR standards. An additional concern is progress in research data management matters, including extending expert advice on the Data Management Plan and the availability of training for research support staff to be able to function as data stewards.

The choice and quantification of specific altmetrics and their integration into research assessment and the identification of incentives to generalize Open Science practices among researchers and research institutes stand out as elements of future interest in the area of **Alternative Metrics and Open Evaluation**

The survey also indicates that there is a need for **training** in all areas of Open Science and that there is a shortage of educational materials for young researchers on OS challenges and the associated skills.

⁵² Three people are involved but this task is not specified among their responsibilities

Finally, with respect to institutional **policy**, there is a clear need to develop or update institutional Open Science policies at either the general level or in several of its specific subdomains.

3. Conclusions

This survey has allowed a diagnosis of the situation in the different areas of open science and has uncovered the strengths and weaknesses of our institutions in these areas.

As noted, current priorities for the Eutopia alliance of universities are in Open Access, Research Data, Alternative Metrics and Open Evaluation, Training, and Policy. These priorities are related, not surprisingly, to some of the weak points identified in the survey, and, in fact, two of them, Training and Policy, match the initial expectations of the project, since the next planned outputs are a report on joint policies and strategies and the development of training guides on Open Science. Therefore, two possible lines of work could be the following:

1. A shared Open Science policy that can then be locally adapted to each of the EUTOPIA universities

A shared institutional overarching policy on Open Science could be a motivational goal and should be the backbone of all actions to progress towards Open Science. None of the institutions have an overarching Open Science policy, so the drafting of a policy can be a strategic opportunity. Within this shared framework and common goals, each university will be able to adapt the policy to its own characteristics and circumstances.

2. Training materials on Open Science for young researchers

Open Science in research is relevant for all stakeholders, but it becomes an essential commodity for the senior researchers of tomorrow. There is a need for training materials that address challenges and skills in Open Science; developing and mutualising materials addressed to young researchers is of strategic importance. These materials should be designed and created in many formats (audiovisual, video tutorials, guides, tests, etc.), must be modular so they can be used in different contexts (curricular courses, brief pills, etc.), and should allow for different levels of depth. They must also be able to function as independent elements for self-training.

Specific implementation details of Open Access and Research Data are also a priority. However, these themes are dealt with specifically in the forthcoming H2020 Eutopia-Train project proposal. Alternative Metrics and Open Evaluation figures prominently as well in the Eutopia-Train proposal as part of the higher-level issue of the redefinition of research career assessment.

There is a number of themes for which weak points are detected at different universities. One of these themes, Open Educational Resources, is also explicitly mentioned in the original EUTOPIA project proposal as an area of interest. Therefore, a third line of work could be the following:

3. A strategy to promote the use and production of Open Educational Resources

The use of Open Educational Resources (OER) across EUTOPIA universities is scarce. Today universities are having to conduct more online training and it is therefore essential to have a strategy to promote and facilitate the creation of Open Educational Resources (OER) so that they can be mutualised for integration into different courses and subjects. Awareness of Open Education will be raised through promotional campaigns addressed to faculty and the wider university community and educational activities will enable faculty and staff to engage actively in the implementation of OER.

A specific Working Group could be created to advance on these three lines of work, which could integrate 2 experts from each university in the areas of Open Science and Educational Resources in a more focussed manner.

4. Appendix: list of survey questions

EUTOPIA BEST PRACTICES FOR OPEN SCIENCE: Questionnaire

This questionnaire aims to perform a comprehensive analysis of each institution, regarding its policies, infrastructures and figures related to Open Science and to identify strengths and weaknesses for the EUTOPIA Open Science strategy.

The questionnaire will be available from 26 February – 13 March 2020.

Check the glossary at the end of this document for definitions of some concepts.

Section 1. General information

Provide basic information about your university.

- 1.1. Select university
- 1.2. Name of the person answering the questionnaire
- 1.3. Position of the person answering the questionnaire
- 1.4. Email of the person answering the questionnaire

1.5. Name(s) of the person(s) responsible for the OS (Open Access, Open Educational Resources, etc.) issues

1.6. Email of the person(s) responsible for the OA/OS policy

1.1. Select university

- CY Cergy Paris Université
- Göteborgs Universitet
- Universitat Pompeu Fabra
- University of Warwick
- Univerze v Ljubljani
- Vrije Universiteit Brussel

1.2. Name of the person answering the questionnaire

1.3. Position of the person answering the questionnaire

1.4. Email of the person answering the questionnaire

1.5. Name(s) of the person(s) responsible for the OS (Open Access, Open Educational Resources, etc.) issues (please, specify responsabilities)

1.6. Email of the person(s) responsible for the OA/OS policy

Section 2. Policies & strategies

Identify and describe the policies and strategies on Openness. First, at national/regional level and then for your university.

- 2.1. National/regional Open Science policies or good practices affecting your university
- 2.2. Institutional policies, mandates, etc. related to Open Science
- 2.3. Citizen science strategy
- 2.4. Endorsement declarations
- 2.5. Funding
- 2.6. Incentives

2.1. National/regional Open Science policies or good practices affecting your university

A. Does your country/region have any policies or good practices on Open Science?

```
YesNoIf YES, please enter:
```

- URL:

- Short description (date(s) of implementation, what it covers/they cover, etc.):

B. Does your country/region have any policies or good practices on Open Access?

- Yes
- 🗆 No

If YES, please enter:

- URL:_____

- Short description (date(s) of implementation, what it covers/they cover, etc.):

C. Does your country/region have any policies or good practices on Research Data?

- □ Yes
- 🗆 No

If YES, please enter:

- URL: _____
- Short description (date(s) of implementation, what it covers/they cover, etc.):

D. Does your country/region have any policies or good practices on Alternative Metrics and Open Evaluation?

- Yes
- 🗆 No

If YES, please enter:

- URL:

-	Short	description	(date(s)	of	implementation,	what	it	covers/they	cover,	etc.):
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E. Does your country/region have any policies or good practices on Citizen Science?

Yes

🗆 No

If YES, please enter:

- URL: _____

- Short description (date(s) of implementation, what it covers/they cover, etc.):

F. Does your country/region have any policies or good practices on Open Educational Resources?

Yes

🗆 No

If YES, please enter:

- URL: _____

- Short description (date(s) of implementation, what it covers/they cover, etc.):

G. Does your country/region have any policies or good practices on Open Data?

- Yes
- 🗆 No

If YES, please enter:

- URL:

- Short description (date(s) of implementation, what it covers/they cover, etc.):

2.2. Institutional policies, mandates, etc. related to Open Science A. Does your university have any policy on Open Science?

YesNoIf YES, please enter:

- URL:

- Short description (date(s) of implementation, what it covers/they cover, etc.):

B. Does your university have any policy on Open Access?

Yes

□ No If YES, please enter:

- URL:

- Short description (date(s) of implementation, what it covers/they cover, etc.):

C. Does your university have any policy on Research Data?

- Yes
- 🗆 No

If YES, please enter:

- URL: _____

- Short description (date(s) of implementation, what it covers/they cover, etc.):

D. Does your university have any policies on Alternative Metrics and Open Evaluation?

- □ Yes
- 🗆 No

If YES,	please	enter:
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- URL: _____

-	Short	description	(date(s)	of	implementation,	what	it	covers/they	cover,	etc.):
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E. Does your university have any policy on Citizen Science?

- Yes
- 🗆 No
- If YES, please enter:
- URL: _____

- Short description (date(s) of implementation, what it covers/they cover, etc.):

F. Does your university have any policy on Open Educational Resources?

- Yes
- 🗆 No

If YES, please enter:

- URL: _____

- Short description (date(s) of implementation, what it covers/they cover, etc.):

G. Does your university have any policy on Open Data?

- □ Yes
- 🗆 No
- If YES, please enter:
- URL: ______

- Short description (date(s) of implementation, what it covers/they cover, etc.):

2.3. Citizen Science strategy

A. Does your university have a Citizen Science strategy?

- Yes
- 🗆 No

If YES,	please	enter:
---------	--------	--------

- URL:

- Short description (date(s) of implementation, what it covers/they cover, etc.):

B. Does your university carry out Citizen Science activities?

- Yes
- 🗆 No

If YES, please provide a short description: _____

C. Does your university have makerspaces/fab labs?

- Yes
- 🗆 No

If YES, please enter:

- URL:

- Short description _____

2.4. Endorsement declarations

A. Does your university sign/endorse any declaration related to Open Access/Open Science?

- □ Budapest Declaration (BOAI: Budapest Open Access Initiative)
- Bethesda Declaration
- Berlin Declaration
- DORA Declaration (Declaration on Research Assessment)
- □ Leiden Manifesto for Research Metrics
- □ Bratislava Declaration of Young Researchers
- Other (specify):

2.5. Funding

A. Of the following activities, for which (if any) does your university know the cost of Open Science?

- □ APC costs
- □ Licensing agreement costs
- □ Training and awareness-raising activities
- Other (specify): ______

B. Does your university have a clear estimation of the overall costs related to Open Science research and activities?

- Yes
- 🗅 No

2.6. Incentives

A. Does your university implement any incentives to improve Open Science practices?

- Yes
- 🛛 No

If YES, please select how to recognize these incentives:

- Economic incentives
- □ Time (teaching relief, etc.)
- Prizes/awards
- □ Career assessment paths (tenure and promotion processes)
- Other (specify): ______

Section 3. Research integrity

Identify and describe policies or similar instruments on research integrity (for example, code of conduct) and ethics committees.

3.1. Code of conduct

3.2. Ethics committees

3.1. Code of conduct

A. Do any other organizations or authorities in your country/state/region have a policy or similar instrument on research integrity?

YesNoIf YES, please enter:

- URL: _____

- 3	Short	description	(date(s)	of	implementation,	what	it	covers/they	cover,	etc.):
-----	-------	-------------	----------	----	-----------------	------	----	-------------	--------	--------

B. Does your university have a policy or similar instrument on research integrity?

- Yes
- 🗆 No

If YES, please enter:

- URL: _____

- Short description (date(s) of implementation, what it covers/they cover, etc.):

C. Do researchers who are funded/employed by your university make a formal commitment to research integrity?

- Yes
- 🗆 No

If YES, please enter:

- URL: _____

- Short description (date(s) of implementation, what it covers/they cover, etc.):

D. Does your university have information about research integrity on its website?

□ Yes

🗆 No

If YES, please enter:

- URL:

- Short description (date(s) of implementation, what it covers/they cover, etc.):

3.2. Ethics committees

A. Does your university have any ethics committees?

Yes

🗆 No

If YES, please enter:

- URL: _____

- Short description (name(s) of the different committees, scope, activities):

Section 4. Infrastructures

Identify and describe the infrastructures that your university offers to researchers to manage research output at different stages of the research cycle.

- 4.1. Open Access Repository
- 4.2. Research Data Repository
- 4.3. Open Educational Resources Repository
- 4.4. Open Data Repository

4.5. 4.6. Costs

4.1. Open Access Repository

A. Does your university have an Open Access Repository?

CRIS

□ No (continue to 4.2)

B. Repository URL					
C. Re	pository platform/software				
	DSpace				
	EPrints				
	Invenio				
	Fedora				
	Other:				
D.	Metadata	format(s)			
E. Nu	mber of records				
F. Nu	mber of metadata only records				
G. Ty	pe of content:				
-	Papers (%)				
-	Theses and dissertations (%)				
-	Master's papers and other academic works (%)				
-	Reports (%)				
-	Institutional documents (%)				
-	Other (%)				
H. An	v restrictions?				
	,				
	as the renository offer metrics?				
1. 000					
	Yes				
	No				
II YES	o, specify which:				

Article-level metrics (please specify):

- Author-level metrics (please specify): ______
- Journal-level metrics (please specify): ______
- Others (please specify): ______

J. Does the repository offer altmetrics?

- Yes
- 🗆 No

If YES, specify which:

- □ Altmetric.com
- ImpactStory
- D PLUMx
- Datacite
- Bookmetrix
- □ F1000Prime
- Data citations
- □ ResearchGate views
- Others (please specify): ______

K. Is the repository certified (e.g. CoreTrustSeal)?

- Yes
- 🗆 No
- If YES, specify which: _____

L. Is the repository OpenAIRE compliant?

- Yes
- 🗆 No

4.2. Research Data Repository

A. Does your university have a Research Data Repository?

- Yes
- □ No (continue to 4.3)

B. Repository URL _____

C. Repository platform/software

- □ DSpace
- □ CKAN
- Dataverse
- □ Figshare
- Invenio
- □ Other:_____

D. Metadata format(s) _____

E. Number of records _____

F. Does the repository have any restrictions? (e.g. size of the datasets, formats)

G. Is your repository a DOI provider?

- Yes
- 🗆 No
- If YES, please enter the agency: _____

H. Does your data repository follow FAIR principles?

- □ Yes
- Partially
- 🗅 No

I. Is the repository certified (e.g. CoreTrustSeal)?

- Yes
- 🗅 No

```
If YES, specify which: _____
```

4.3. Open Educational Resources Repository

A. Does your university have an Open Educational Resources Repository?

- Yes
- □ No (continue to 4.4)

B. Repository URL

C. Rep	oository platform/software
-	
	DSpace
	CKAN
	Dataverse
	Figshare
	Invenio
	Other:
D. Met E. Nur	adata format(s)
F. Nur	nber of metadata only records

G. Type of content:

- Images (%)
- Lecture videos (%)
- Lesson plans (%)
- Maps (%)_____
- Podcasts (%)_____
- Presentation slides (%)
- Syllabuses (%)
- Textbooks (%)
- Worksheets (%)_____
- Other (%)_____

H. Does the repository have any restrictions? (e.g. document typology, file size, formats) _____

4.4. Open Data Repository

A. Does your university have an Open Data Repository?

- Yes
- □ No (continue to 4.5)

B. Repository URL

C. Repository platform/software
CKAN
□ Dataverse
Figshare
□ Other:
D. Metadata format(s)
E. Number of records
F. Does the repository have any restrictions? (e.g. document typology, file size, formats)
G. Is your repository a DOI provider?
□ Yes
□ No
If YES, please enter the agency:
H. Does your data repository follow FAIR principles?
Partially
□ No
I. Is the repository certified (e.g. CoreTrustSeal)?
□ No
If YES, specify which:
4.5. CRIS
A. Does your university have a CRIS (Current Research Information System)?

Yes

□ No (continue to Section 4.6)

B. CRIS URL (if openly available) _____

C. CRIS platform/software _____

D. Metadata format(s). Is it CERIF compliant?

- Yes
- 🗆 No

E. Does your CRIS connect with your institutional repositories?

- Yes
- 🗆 No

If YES, please select with which repositories:

- □ Open Access Repository
- □ Research Data Repository
- Open Educational Resources Repository

F. Does your CRIS offer metrics?

- Yes
- 🗆 No

If YES, specify which:

G. Does your CRIS offer altmetrics?

- Yes
- 🗆 No

If YES, specify which:

- □ Altmetric.com
- □ ImpactStory
- PLUMx
- Datacite
- Bookmetrix
- □ F1000Prime

- Data citations
- □ ResearchGate views
- Others (please specify): ______

H. Does your university use the CRIS for any evaluation process?

- Yes
- 🗆 No

If YES, please specify:

- URL: _____

- Short description (date of implementation, workflow):

4.6. Costs

A. Does your university know the cost of developing and maintaining all the infrastructures from section 4?

Yes

🗆 No

- Comments: _____

Section 5. Visibility of researchers

Explain the services introduced by the university to visualize researchers and their research.

5.1. Persistent identification

5.2. Expert finder

5.1. Persistent identification

A. Does your university have a global common policy for the persistent identification of researchers (e.g. ORCID, ScopusID)?

Yes

🛛 No

If YES, please specify:

- URL: _____

- Short description (date(s) of implementation, what it covers/they cover, etc.):

B. Indicate which of the following persistent identification systems are supported by your university:

- Publons (Web of Science)
- ScopusID
- Google Scholar profile
- Other (specify): _____

Comments about researcher identification

5.2. Expert finder

A. Does your university have an expert finder/Open CRIS?

- Yes
- 🗆 No

If YES, please enter:

- URL: _____

- Short description (include technical description if relevant):

- Comments about expert finder: _____

B. Which of these Scientific Social Network Sites are used/promoted by your university?

- ResearchGate
- Academia.edu
- □ Publons (open peer review)
- □ Twitter
- Other (specify): ______

C. Does your university have any policy regarding Scientific Social Network Sites? expert finder/Open CRIS?

- Yes
- 🗆 No

If YES, please enter:

- URL: _____

- Short description (date(s) of implementation, what it covers/they cover, etc.):

Section 6. Training

Explain the training in Open Science and other training offered by your university. Identify who offers it and the types of training.

- 6.1. Training in Open Science
- 6.2. Training in Open Access
- 6.3. Training in Research Data
- 6.4. Training in Alternative Metrics and / or Open Evaluation
- 6.5. Training in Open Educational Resources
- 6.6. Training in Open Data
- 6.7. Training about the CRIS platform
- 6.8. Training in visibility of researchers

6.1. Training in Open Science

A. Does your university offer training in Open Science?

- Yes
- □ No (continue to 6.2)

B. Who provides training in Open Science at your university?

- □ Library
- IT Service
- □ Research Office
- □ Academic Department
- Other (specify): _____

C. Who attends training in Open Science at your university?

- Staff
- Faculty
- □ Students
- Other (specify): _____

D. If students are admitted to the training in Open Science available at your university, are these courses part of the academic curriculum?

- Yes
- 🗆 No

If YES, please specify:

E. Which type of training in Open Science is offered?

- Online
- □ Face-to-face
- □ Infographic
- Print materials
- Tutorials
- Other (specify): ______

F. Please enter the URL of the training web pages: _____

G. Which are the two most valued types of training in Open Science at your university?

H. Which two types of training in Open Science are missing at your university?_____

6.2. Training in Open Access

A. Does your university offer training in Open Access?

- Yes
- \Box No (continue to 6.3)

B. Who provides training in Open Access at your university?

- □ Library
- □ IT Service
- □ Research Office
- □ Academic Department
- Other (specify): _____

C. Who attends training in Open Access at your university?

- Staff
- Faculty
- □ Students
- Other (specify): ______

D. If students are admitted to the training in Open Access available at your university, are these courses part of the academic curriculum?

Yes

- 🗆 No
- If YES, please specify:_____

E. Which type of training in Open Access is offered?

- Online
- □ Face-to-face
- □ Infographic
- Print materials
- Tutorials
- Other (specify): ______

F. Please enter the URL of the training web pages: _____

G. Which are the two most valued types of training in Open Access at your university?

H. Which two types of training in Open Access are missing at your university?____

6.3. Training on Research Data

A. Does your university offer training in Research Data?

- Yes
- \Box No (continue to 6.4)

B. Who provides training in Research Data at your university?

- □ Library
- □ IT Service
- □ Research Office
- □ Academic Department
- Other (specify): _____

C. Who attends training in Research Data at your university?

□ Staff

	Faculty
_	· · · · · · · · · · · · · · · · · · ·

- □ Students
- Other (specify): _____

D. If students are admitted to the training in Research Data available at your university, are these courses part of the academic curriculum?

- Yes
- 🗆 No

If YES, please specify:_	
--------------------------	--

E. Which type of training in Research Data is offered?

- Online
- □ Face-to-face
- Infographic
- Print materials
- Tutorials
- Other (specify): ______

F. Please enter the URL of the training web pages: _____

G. Which are the two most valued types of training in Research Data at your university?

H. Which two types of training in Research Data are missing at your university?___

6.4. Training in Alternative Metrics and / or Open Evaluation

A. Does your university offer training in Alternative Metrics and / or Open Evaluation?

- Yes
- □ No (continue to 6.5)

B. Who provides training in Alternative Metrics and / or Open Evaluation at your university?

- □ Library
- □ IT Service
- □ Research Office
- □ Academic Department

Other (specify): _____

C. Who attends training in Alternative Metrics and / or Open Evaluation at your university?

□ Staff

- Faculty
- Students
- Other (specify): ______

D. If students are admitted to the training in Alternative Metrics and / or Open Evaluation available at your university, are these courses part of the academic curriculum?

- Yes
- 🗆 No

If YES, please specify:	_
-------------------------	---

E. Which type of training in Alternative Metrics and / or Open Evaluation is offered?

- Online
- □ Face-to-face
- □ Infographic
- Print materials
- Tutorials
- Other (specify): ______

F. Please enter the URL of the training web pages: _____

G. Which are the two most valued types of training in Alternative Metrics and / or OpenEvaluationatyouruniversity?

H. Which two types of training in Alternative Metrics and Open Evaluation are missing at your university?

6.5. Training on Open Educational Resources

A. Does your university offer training in Open Educational Resources?

- Yes
- □ No (continue to 6.6)

B. Wh	o provides training in Open Educational Resources at your university?
	Library
	IT Service
	Research Office
	Academic Department
	Other (specify):
C. Wh	o attends training in Open Educational Resources at your university?
	Staff
	Faculty
	Students
	Other (specify):
D. If s your u	tudents are admitted to the training in Open Educational Resources available at university, are these courses part of the academic curriculum? Yes
	no S please specify:
E. Wh	ich type of training in Open Educational Resources is offered?
	Online
	Face-to-face
	Infographic
	Print materials
	Tutorials
	Other (specify):

F. Please enter the URL of the training web pages: _____

G. Which are the two most valued types of training in Open Educational Resources at your university?

H. Which two types of training in Open Educational Resources are missing at your university?_____

6.6. Training in Open Data

A. Does your university offer training in Open Data?

- Yes
- \Box No (continue to 6.7)

B. Who provides training in Open Data at your university?

- □ Library
- □ IT Service
- Research Office
- □ Academic Department
- Other (specify): _____

C. Who attends training in Open Data at your university?

- □ Staff
- □ Faculty
- □ Students
- Other (specify): _____

D. If students are admitted to the training in Open Data available at your university, are these courses part of the academic curriculum?

- Yes
- 🗆 No

If YES, please specify:_____

E. Which type of training in Open Data is offered?

- Online
- □ Face-to-face
- □ Infographic
- Print materials
- Tutorials
- Other (specify): ______

F. Please enter the URL of the training web pages: _____

G. Which are the two most valued types of training in Open Data at your university?

H. Which two types of training in Open Data are missing at your university?____

6.7. Training about the CRIS platform (if any)

A. Does your university offer training in the CRIS?

- Yes
- □ No (continue to 6.8)

B. Which unit/department provides training about the CRIS platform at your university?

- Library
- □ IT Service
- Research Office
- □ Academic Department
- Other (specify): _____

C. Who attends training about the CRIS platform at your university?

- Staff
- □ Faculty
- □ Students
- Other (specify): ______

D. Which type of training in the CRIS is offered?

- Online
- □ Face-to-face
- □ Infographic
- Print materials
- Tutorials
- Other (specify): ______

E. Please enter the URL of the training web pages: _____

F. Which are the two most valued types of training in the CRIS at your university?

G. Which two types of training in the CRIS are missing at your university?_____

6.8. Training in visibility of researchers (include researcher identifiers, academic social networks, expert guides...)

A. Does your university offer training in visibility of researchers?

- Yes
- □ No (continue to 7)

B. Who provides training in visibility of researchers at your university?

- □ Library
- □ IT Service
- Research Office
- □ Academic Department
- Other (specify): _____

C. Who attends training in visibility of researchers training at your university?

- Staff
- Faculty
- □ Students
- Other (specify): _____

D. If students are admitted to the training in visibility of researchers available at your university, are these courses part of the academic curriculum?

Yes

🗆 No

If YES, please specify:_____

E. Which type of training in visibility of researchers is offered?

- Online
- Face-to-face
- □ Infographic
- Print materials

- Tutorials
- Other (specify): ______

F. Please enter the URL of the training web pages: _____

G. Which are the two most valued types of training in visibility of researchers at your university?

H. Which two types of training in visibility of researchers are missing at your university?

Section 7. Human resources for Open Science

Identify and describe the human resources for Open Science at your university and the people/departments that support these activities.

- 7.1. Open Science Committees/Working Groups
- 7.2. Specific coordinator/leader for Open Science
- 7.3. Open Science staff
- 7.4 Departments involved in Open Science activities

7.1. Open Science Committees/Working Groups

A. Does your university have Open Science Committees/Working Groups?

- Yes
- 🗆 No

If YES, please enter:

- Name of the Committee(s) or Group(s)

- URL:

- Short description (topics, meetings, etc.):

B. Does your university have Open Access Committees/Working Groups?

- Yes
- 🗆 No

If YES, please enter:

- Name of the Committee(s) or Group(s)

- URL:	·	

- Short description (topics, meetings, etc.):

C. Does your university have Research Data Committees/Working Groups?

- Yes
- 🗆 No

If YES, please enter:

- Name of the Committee(s) or Group(s)

- URL: _____

- Short description (topics, meetings, etc.): _____

D. Does your university have Alternative Metrics and Open Evaluation Committees/Working Groups?

- Yes
- 🗆 No

If YES, please enter:

- Name of the Committee(s) or Group(s)

- URL: _____

- Short description (topics, meetings, etc.):

E. Does your university have Citizen Science Committees/Working Groups?

- Yes
- 🗆 No
- If YES, please enter:

- Name of the Committee(s) or Group(s)

- URL: _____

- Short description (topics, meetings, etc.):

F.	Does	your	university	have	Open	Educational	Resources	Committees/Working
Gr	oups?							

- Yes
- 🗆 No

If YES, please enter:

- Name of the Committee(s) or Group(s)

I IRI ·			
URL.			

- Short description (topics, meetings, etc.): _____

G. Does your university have Open Data Committees/Working Groups?

- Yes
- 🗆 No

If YES, please enter:

- Name of the Committee(s) or Group(s)

- URL: _____

- Short description (topics, meetings, etc.):

7.2. Specific coordinator/leader for Open Science

A. Does your university have Open Science coordinator/leader?

- Yes
- 🗅 No

If YES, please enter:

- Name			

-	Email				

B. Does your university have an Open Access coordinator/leader?

- □ Yes
- 🗆 No

If YES, please enter:

- Name

- Email _____

C. Does your university have a Research Data coordinator/leader?

🗆 Yes

🗆 No

If YES, please enter:

- Name			
- Email			

D. Does your university have Alternative Metrics and Open Evaluation coordinator/leader?

Yes

🗆 No

If YES, please enter:

- Name ______

- Email

E. Does your university have a Citizen Science coordinator/leader?

- 🛛 Yes
- 🗆 No

If YES, please enter:

- Name ______

- Email ______

F. Does your university have an Open Educational Resources coordinator/leader?

- Yes
- 🗆 No
- If YES, please enter:

- Name

- Email

G. Does your university have an Open Data coordinator/leader?

Yes

□ No If YES, please enter:

- Name ______

- Email ______

7.3. Open Science staff

A. Open Science activities

- How many people are employed to provide support for Open Science activities at your university, in terms of full-time equivalents (i.e. one person full time = 1)? _____

- Who is responsible for providing Open Science activities?

- Librarian
- 🗆 IT
- □ Research Officer
- Other (specify): ______

- Which departments are responsible for organizing Open Science activities?

- Libraries
- D IT
- □ Research Office
- □ Academic Department(s)
- Other (specify): _____

B. Open Access activities

- How many people are employed to provide support for Open Access activities at your university, in terms of full-time equivalents (i.e. one person full time = 1)? _____

- Who is responsible for providing Open Access activities?

- Librarian
- D IT
- □ Research Officer
- Other (specify): ______

- Which departments are responsible for organizing Open Access activities?

Lib	raries
	anoo

- L IT
- □ Research Office
- □ Academic Department(s)
- Other (specify): _____

C. Research data activities

- How many people are employed to provide support for Research Data activities at your university, in terms of full-time equivalents (i.e. one person full time = 1)?

- Who is responsible for providing Research Data activities?

- Librarian
- D IT
- □ Research Officer
- Other (specify): ______

- Which departments are responsible for organizing Research Data activities?

- □ Libraries
- D IT
- □ Research Office
- □ Academic Department(s)
- Other (specify): _____

D. Alternative Metrics and Open Evaluation activities

- How many people are employed to provide support for Alternative Metrics and Open Evaluation activities at your university, in terms of full-time equivalents (i.e. one person full time = 1)? _____

- Who is responsible for providing Alternative Metrics and Open Evaluation activities?

- Librarian
- 🗆 IT
- □ Research Officer
- Other (specify): _____

- Which departments are responsible for organizing Alternative metrics and Open Evaluation activities?

- Libraries
- 🗆 IT
- □ Research Office
- □ Academic Department(s)
- Other (specify): ______

E. Citizen Science activities

- How many people are employed to provide support for Citizen Science activities at your university, in terms of full-time equivalents (i.e. one person full time = 1)?

- Who is responsible for providing Citizen Science activities?

- Librarian
- 🗆 IT
- □ Research Officer
- Other (specify): _____

- Which departments are responsible for organizing Citizen Science activities?

- Libraries
- 🗆 IT
- □ Research Office
- □ Academic Department(s)
- Other (specify): ______

F. Open Educational Resources activities

- How many people are employed to provide support for Open Educational Resources activities at your university, in terms of full-time equivalents (i.e. one person full time = 1)? _____

- Who is responsible for providing Open Educational Resources activities?

- Librarian
- D IT
- □ Research Officer
- Other (specify):

- Which departments are responsible for organizing Open Educational Resources activities?

- Libraries
- D IT
- □ Research Office
- □ Academic Department(s)
- Other (specify):

G. Open Data activities

- How many people are employed to provide support for Open Data activities at your university, in terms of full-time equivalents (i.e. one person full time = 1)?

- Who is responsible for providing Open Data activities?

- Librarian
- D IT
- □ Research Officer
- Other (specify): ______

- Which departments are responsible for organizing Open Data activities?

- Libraries
- D IT
- □ Research Office
- □ Academic Department(s)
- Other (specify): _____

Section 8. Final review and additional comments

Define the top priorities for your University regarding Open Science and add other relevant issues.

- 8.1. Priorities regarding Open Science
- 8.2. Other comments

8.1. Priorities regarding Open Science

A. Set out the top 5 priorities for your university regarding Open Science

8.2. Other comments

A. Within the framework of the EUTOPIA project, add other relevant issues from your university's perspective that might be relevant concerning Open Science. Please include ideas, comments, possible future common strategies, etc.

Data protection

In accordance with the provisions of the General Data Protection Regulation, Regulation (EU) 2016/679, below we summarize our data protection information:

Data controller: Universitat Pompeu Fabra. Pl. de la Mercè, 12. 08002 Barcelona. Tel. (+34) 935 422 000.

Purposes of processing: to implement the initial projects of EUTOPIA. Your personal data will be kept as long as they are necessary for the projects of EUTOPIA. The provisions established in the regulations governing files and documentation shall apply.

Legal basis: processing is necessary for the performance of a task carried out in the public interest (Article 30 of Law 1/2003 governing Catalan universities).

Recipients: Pompeu Fabra University, other EUTOPIA member institutions and companies providing ancillary IT services, upon the signature of contracts that preserve privacy. Your personal data will not be transferred to third parties without your consent, except when otherwise provided for by law.

Rights: you can access your data, request their rectification or deletion, oppose their processing and request their limitation by contacting the UPF general manager (gerencia@upf.edu). You can contact UPF's Data Protection Officer (dpd@upf.edu) if you have any questions regarding your personal data. If you think your rights have not been respected you can lodge a complaint with UPF's Data Protection Officer, prior to submitting a complaint to the Catalan Data Protection Authority (apdcat.gencat.cat). The DPO will notify as to his/her decision within two months of its receipt.

<u>Glossary</u>

Alternative metrics (Altmetrics)	Altmetrics are alternative ways of recording and measuring the use and impact of scholarship. Rather than solely counting the number of times a work is cited in scholarly literature, alternative metrics also measure and analyze social media (e.g., Facebook, Twitter, blogs, wikis, etc.), document downloads, links to published and unpublished research, and other uses of research literature, in order to provide a more comprehensive measurement of reach and impact.
CERIF	CERIF (Common European Research Information Format) is the standard recommended by the EU for member states to record information about research activity.
Citizen Science	Participation of non-scientists in science, including the social sciences and the humanities. Through collaborative methods and technologies, citizens can participate in research design, data gathering, analysis, and in dissemination and exploitation activities. Furthermore, citizens can act as funders, e.g. via crowdfunding, and evaluate research results.
CRIS (Current Research Information System)	A Current Research Information System (CRIS) is a database or other information system used to store, manage and exchange contextual metadata about the research activity (inputs and outputs) conducted at a research-performing organisation (or aggregation thereof).
FAIR Data	FAIR Data (according to <u>FORCE11 principles</u> and published in <u>Nature</u> <u>Scientific Data</u>) are Findable, Accessible, Interoperable, and Re-usable, in order to facilitate knowledge discovery by assisting humans and machines in their discovery of, access to, integration and analysis of, task- appropriate scientific data and their associated algorithms and workflows.
MakerSpaces (or fab labs)	Makerspace is a widespread term commonly used to refer to any generic space that promotes active participation, knowledge sharing, and collaboration among individuals through open exploration and creative use of tools and technology.

Open Access	Open Access refers to online, free-of-cost access to peer reviewed scientific content, with free reusability regarding copyright restrictions.
Open Data	Open Data is data generated by public institutions as a means to maximize available public resources and expose the information generated or guarded by them, allowing access and use for the common good and for the benefit of anyone interested. This public information, of great potential value, can be relative to any subject and of any type —pictographic documents, statistical data, results of studies or analyses, information on public services, etc.—. Companies, researchers, other public institutions or citizens in general may make use of information resources for any purpose, maximizing the economic and social possibilities offered by this project: promotion of transparency in management, improvement of services to citizens , generation of business activities and social impact, in search of efficiency in governance. Within the scope of this questionnaire, research data is not included within Open Data.
Open Educational Resources	Open Educational Resources are learning materials that are made freely available for use, remixing and redistribution.
Open Evaluation	In an Open Evaluation environment, the criteria, methods, and databases for assessment are transparent, open, and freely accessible. It may include written peer reviews, numerical ratings, usage statistics, social web information and citations, in combination with other usage or participatory elements from social media.
Open Peer Review	An umbrella term for a number of overlapping ways that peer review models can be adapted in line with the aims of Open Science, including making reviewer and author identities open, publishing review reports and enabling greater participation in the peer review process.
Open Science	Open science is the movement to make scientific research, data and dissemination accessible to all levels of an inquiring society.

Repository	Repository is defined as the infrastructure and the corresponding service that allows for the persistent, efficient and sustainable storage of digital objects (such as documents, data and code).
Research Data	Research data is any information that has been collected, observed, generated or created to validate original research findings. This data can be open or closed.
Training	Training is any organised activity that teaches, informs, or transfers skills or knowledge on specific useful competencies through active, engaged learning.