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Elli Papadopoulou

OpenAIRE, ATHENA Research & Innovation Center

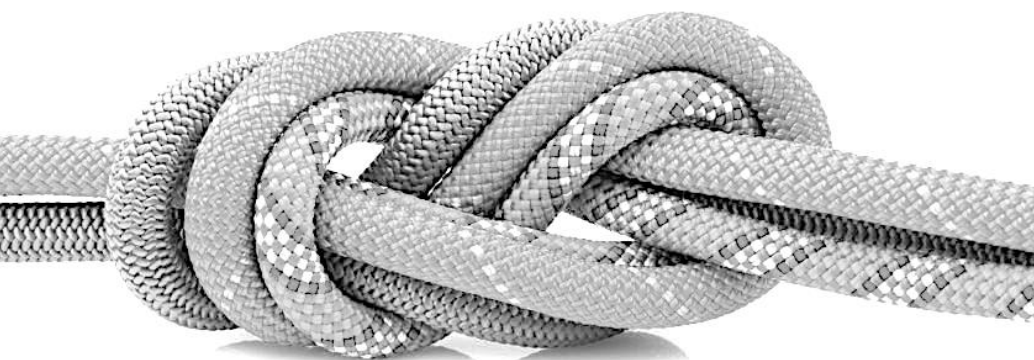
The routes and mandates of Open Science *publications, data and tips for proposals*



Turkey in Horizon 2020 | FGT-11: Focus Group
Training on Open Science | 19 April 2021



What is Open Science



Spiros Athanasiou et al, 2020. National Plan for Open Science.

Open Science is the **new standard of practices, means and collaboration** for producing and distributing scientific output and research results, with a direct scientific, economic and societal impact

Core principles

1. **Collaboration**
2. **Open Access**
Read and access scientific information
3. **FAIR* principles**
Discovery, Interoperability, Reuse
4. **Documentation**
Transparency, Accuracy

Areas of action

Scientific outputs

Infrastructures and services for research

Training and new skills

Why Open Science?

Research

- Reach wider audience
- Re-use research outputs
 - Validate research
- Prevent information and data loss

Economy

- Stimulate innovation
- Strengthen regional and national markets
 - New job openings

Researchers

- Promote integrity
- Increase use of citations and get more credits
- Rewards in the EOSC

Society

- Builds trust ← transparency
- Inclusivity in Science → Citizen Science
- Collaborations on national and EU level



The image features the Horizon 2020 logo, which consists of a large blue circle with a white ring inside it. The text "Horizon 2020" is centered within the white ring in a white, sans-serif font.

Horizon 2020

Article 29

Publications

Article 29.2 Grant Agreement
- Open Access
(check embargo periods)


“As open as possible,
as closed as necessary”

Article 29.3 Grant Agreement
- Open & FAIR data
- DMP “living document”

Research Data

What is perceived as “publication”?

Peer-reviewed publications' means publications that have been evaluated by other scholars (e.g. articles in scientific journals).

 Other types of scientific publications, such as non-peer-reviewed articles as well as monographs, books, conference proceedings and 'grey literature' (i.e. informally published material not having gone through a standard publishing process, e.g. reports), are not covered by the open access obligation.

Best practice: However, to ensure fuller and wider access, beneficiaries are encouraged to provide open access also to these other types of scientific publications (where possible).

Deliverables are not
considered publications

Access and preservation

- **Deposit a version of the publication in a literature repository and ensure open access**
 - Embargoes may apply: 6 months for STEM or 12 months for SSH
- **Publish research in an Open Access journal**
 - Article Processing Charges (APCs)

+ open access to
metadata!

Bad examples – invalid repositories

- Research Gate or Google Scholar Profile
- Personal page/blog
- Websites: Department/Institutional or Project website
- Preprint servers that do not accept postprints (e.g. bioRxiv)
- Dropbox or other cloud resources

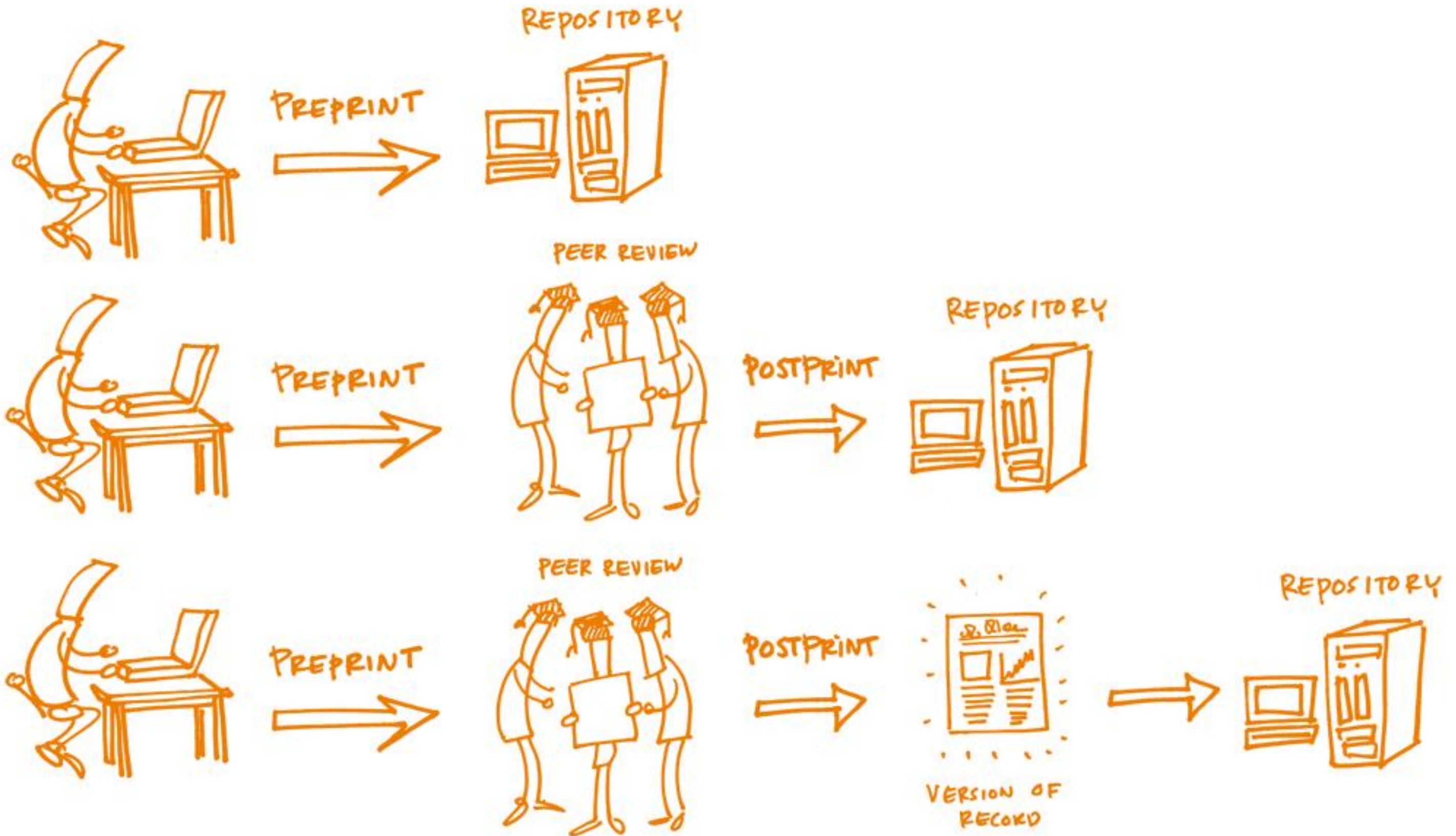


Acknowledge funding

When you deposit, you must also ensure open access to the descriptive metadata that identify the deposited publication. This metadata must be in a standard format and must include all of the following:

- the words ["European Union (EU)" and "Horizon 2020"] ["Euratom" and Euratom research and training programme 2014-2018"];
- the name of the project, acronym and grant number;
- the publication date, and length of embargo period if applicable, and
- a persistent identifier.

MODES OF SELF-ARCHIVING



The image features a large, dark blue circle centered on a white background. The text "Horizon Europe" is written in white, sans-serif font across the center of the blue circle. The overall design is clean and modern, typical of the Horizon Europe branding.

Horizon Europe

Open Science mainstreamed

Publications

- Immediate Open Access
- Intellectual Property Rights
 - Copyright
 - TDM

Research Data

- Immediate access to underlying data
- FAIR data
- DMP “living documents”
- Preservation

Practices

- Incentives for Open Science practices, with appropriate metrics
 - Metadata under CC0
 - Data: CC-BY or CC0 license

OA to peer-reviewed scientific publications

Beneficiaries (or authors) **must retain sufficient intellectual property rights to comply** with the open access requirements

Beneficiaries must ensure **OA to peer-reviewed scientific publications** relating to their results. In particular, **they must ensure:**

- at the latest upon publication, **deposition** of the AAM or VoR in a trusted repository + **open access via the repository** under **CC BY** or equivalent; CC BY-NC and CC BY-ND are allowed for long-text formats
- information via the repository about any research output/tools/ instruments needed to **validate the conclusions of the scientific publication**

Metadata must be open under **CC 0** or equivalent, in line with the FAIR principles and provide **information about the licensing terms**, amongst others.

Publication may be in venue of choosing but any publication fees are reimbursable only if publishing venue is full open access

Additional Open Science practices

Public emergency

If imposed by the call conditions in case of a public emergency, beneficiaries must (if requested by the granting authority) immediately **deposit any research output** in a repository **+ provide open access to it under CC BY, CC 0** or equivalent.

As an exception, if the access would be against the beneficiaries' legitimate interests, beneficiaries **must grant non-exclusive licenses** — under fair and reasonable conditions — **to legal entities that need the research output to address the public emergency + commit to rapidly and broadly exploit the resulting products and services at fair and reasonable conditions.**

This provision applies up to four years after the end of the action.



Writing Proposals

Tips

Start planning early on!

During proposal writing:

- Outline your dissemination and exploitation strategy, including open access >> impact section of the proposal (how will results be shared, data be managed and shared?)
- Include resources for publication costs (what journals, how many publications, what does it cost on average?) Publishing all articles in APC based open access journals is probably not the right solution, as this can take a substantial amount of the overall project budget.
- Combine publishing in open access journals with depositing in repositories strategies to achieve maximum of open access.

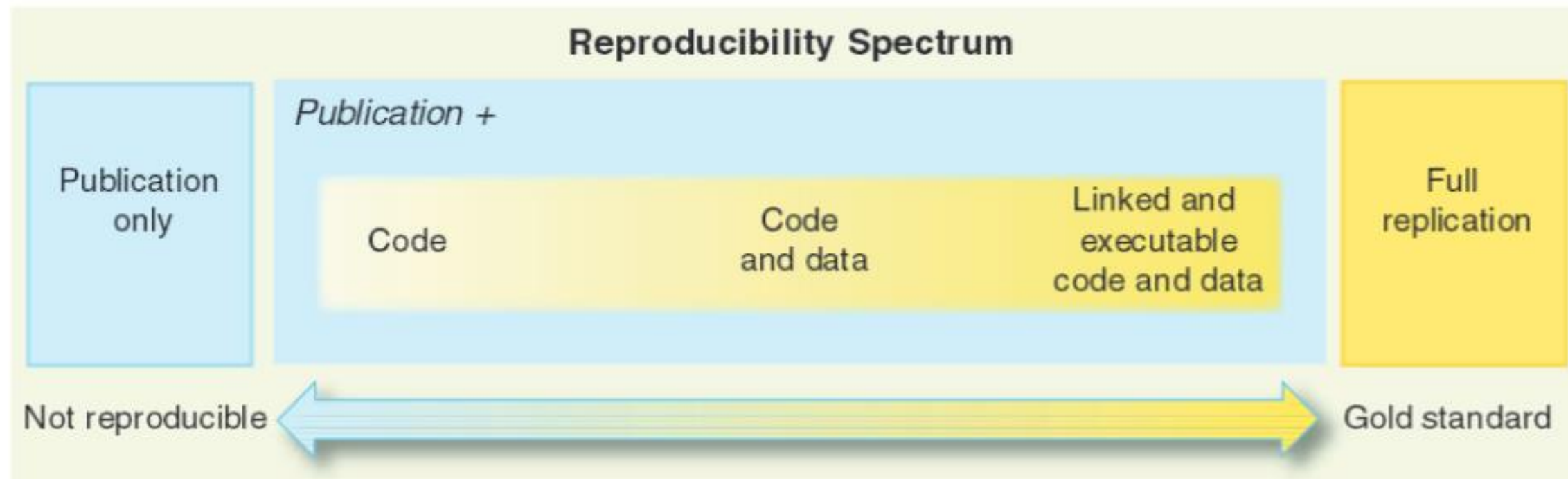
During the project:

- Include additional provisions in the Consortium Agreement - where to deposit, who is responsible.
- Implement your dissemination strategy, report at reviews.
- Keep track of the issues, ask for advice (publisher embargos, repositories for specific material, etc.). We are here to help!

After the project ends:

- Who takes care of depositing in repositories after the project ends?

Open Science for reproducible research



“provide **optimum, traceable and perennial access** to selected research products of the project, from **research data, software code, publications, educational resources, reports, policy briefs** etc, that can help accelerate transfer of new knowledge from academia to society, as well as improve reproducibility of public-funded research”.

What should applicants do

- **Define Open Science strategies and delegate implementation across Work Packages**
 - Dissemination and Communication of results + Knowledge Transfer beyond academia
- **Early DMP submission**
 - outlines what data will be produced and shared
- **Resource allocation for Open Science activities**
 - e.g. extra time to ensure adequate description, quality archiving, and linking of all research objects

Consider re-using other researchers' data

Extra

- **Apply Open Science and FAIR principles to calls involving Infrastructures' development**
 - Services enabling FAIR data
- **Develop Open Science and**
describe it in the
- **Integrate more**
Innovation agencies
and
Research and
 - Gender equality, Citizen Science, etc

Invest in capacity building for
Open Science skills

<https://op.europa.eu/en/publication-detail/-/publication/af7f7807-6ce1-11eb-aeb5-01aa75ed71a1/language-en/format-PDF/source-190694287>

Example

HOW to write "Section 2.2 IMPACT" A generic example

The Project consortium acknowledges that the research and new knowledge generated is of societal benefit, and could potentially contribute toward solutions of societal challenges. As such, the foreground knowledge needs to be disseminated in an optimum way for impact and re-use of results, according to Responsible Research & Innovation (RRI) principles¹⁴.

Currently only 50% of research is freely accessible to the public¹⁵, resulting in measurable loss to the knowledge-based SME sector and slowing down innovation¹⁶. **The Project** consortium will thus optimize on the dissemination and impact of foreground along the full knowledge production chain, and integrate Open Science principles in its Dissemination & Communication Strategy.

In support of the EC Digital Agenda¹⁷ and the European Commission's strategy for the Digital Single Market (Green Action Plan¹⁸), **The Project** will ensure that foreground knowledge is made available at task level. Foreground knowledge will be made available in **STATE** REPOSITORIES, including national security data.

Software code and full access provided to the project partners (to publish) will be made available in **OPEN ACCESS**; request **letters of support**), predominantly relying on the Green Open Access strategy (self-archiving) for maximum return on investment for project and funder, and actively linked to underlying data objects, in support of the EC Open Data Pilot²⁴.

For longevity of knowledge transfer and best practice uptake beyond the project lifetime, **The Project** will cooperate with concurrent training initiatives within FP7 FOSTER²⁵ (DG Research) and OpenAIRE+, and incorporate Open Science training in any summers schools and research training workshops, to assure that the strategy is adopted by the next generation of young researchers (**refer to WP/Tasks dealing with this**).

Focus will be placed on demonstrating that Open Science and RRI are not only for societal and community benefit, but also directly support the career needs for impact, visibility and multiplying collaborations for individual researchers. Alining the societal and research impact of knowledge generation can in the long-term bridge the gap between science and society.

! NOT TO BE REPLICATED !



Reporting

Reporting 1/2

You are free to deposit your peer-reviewed publications in those repositories most appropriate for your subject and publication (for instance a thematic or institutional repository). But you **must continuously report all publications related to your project** in 1 of the following 3 ways:

1. OpenAIRE

For publications accessible via OpenAIRE, references to these publications (with link to the project ID) are displayed automatically in the reporting section of the Funding & Tenders Portal for the project.

Simply check if the references are directly linked to the work performed within the project. If so, tick these publications as relevant and they will then be included in the table of publications when the report is generated.

OpenAIRE

links and federates existing repositories. As such it provides access to publications that have been deposited in all repositories that are technically interoperable with OpenAIRE ("OpenAIRE compliant")

2. DOI

For publications not registered via OpenAIRE, you must enter the Digital Object Identifier (DOI). All the other columns of the table will then be filled automatically.

DOI - Digital Object Identifier

Permanent identifier which should be a persistent link to the published version full text or abstract (if article is pay per view) or to the final manuscript accepted for publication (link to article in repository).

3. No OpenAIRE or DOI

you must manually enter the full reference data.

DOI

Reporting 2/2

You must **answer a number of other questions**:

- **Peer-review** - you can check in the system if the publication is peer-reviewed or not via '*title of publication*' (the *Peer-reviewed* column will then be filled automatically with "YES" or "NO").
If the system answers mistakenly that the publication is not peer-reviewed, you can change the answer by ticking the box "Peer-reviewed YES".
- **Open access** - you have 3 options (**Green OA** - Access is granted after an embargo period, **Gold OA** - Paid open access (processing charges), or **No open access**).
 - Yes Green OA / Specify the length of embargo if any
 - Yes Gold OA / Specify the amount of processing charges, if any in €
 - No

Resources

How to comply with H2020 mandates - publications

How can identifiers improve the dissemination of your research outputs?

Legal issues

How do I know if my research data is protected?

























How do I license my research data?

Can I reuse someone else's research data?

Data reuse stories & use cases

Series of stories and use cases reporting the process of data reuse, describing experiences of reuse of a variety of research data.

ALL A B C D E F G H I L M N P R S T U

 Austria Gerda Mc Neil University of Vienna	 Belgium Inge Van Nieuwerburgh University of Ghent	 Belgium Emilie Hermans University of Ghent	 Bulgaria Peter Stanchev Bulgarian Academy of Sciences	 Bulgaria Georgi Simeonov Bulgarian Academy of Sciences
 Croatia Jadranka Stojanovski Ruđer Bošković Institute	 Cyprus Sylvia Koukouridou University of Cyprus	 Cyprus Natasia Ioannou University of Cyprus	 Cyprus Zafeiro Marti University of Cyprus	 Czech Republic Michal Růžička Masaryk University
 Denmark Asger Vaering Larsen Syddansk Universitet	 Denmark Anne Thorst Melbye Syddansk Universitet	 Estonia Lisi Lembinen University of Tartu	 Finland Pauli Assinen University of Helsinki	 Finland Kimmo Koskinen University of Helsinki
 France Andre Dazy Couperin	 Germany Anja Oberlander University of Konstanz	 Germany Lena Deher University of Konstanz	 Greece Eli Papadopoulou ATHENA Research & Innovation Center	 Greece Ilana Aralika iEKA-Life
 Hungary Gyongyi Karacsony University of Debrecen	 Hungary Judit Fazekas-Paragh University of Debrecen	 Ireland Anna Sigríður Guðnadóttir Lindisfarl University Hospital	 Ireland Niamh Brennan Trinity College Library Dublin	 Ireland Edie Davies Trinity College Library Dublin

Anonymousize your data

For researchers



Report your publication and data to the EC

For project coordinators



Claim a publication or data to your funding

For researchers



Register & validate your repository

For content providers



Content Enrichment

For Repository Managers



Track the usage activity of your repository

For content providers



Research Community Gateway

Link your work to ORCID

For researchers



Thank you!

Eli Papadopoulou

 elli.p@athenarc.gr

ORCID [0000-0002-0893-8509](https://orcid.org/0000-0002-0893-8509)

 [@elli_lib](https://twitter.com/elli_lib)

