







Open Science CLINIQUE for NCP CaRE Network, 26 Apr 2018

Obligations in H2020:

What is expected from candidates on Open Access/Open Data Mandates?







Seminar Hosts & Agenda:



Sanna Alaranta LUXINNOVATION



Ivo Grigorov H2020 FOSTER+

Why this webinar series?

NCP-NOADs Matchmaking

Key Presentation by Jessica Rex

(NOAD, Germany)



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Key Talk Agenda:

What is Open Access? **Open Access Mandate** Open Research Data Mandate Data Management Plans Repositories and Licensing OpenAIRE support

What is Open Access?

Open-access (OA) literature is digital, online, free of charge, and free of most copyright and licensing restrictions. What makes it possible is the internet and the consent of the author or copyright-holder.

Open Access Explained http://phdcomics.com/tv/?v=L5rVH1KGBCY by PhD Comics

Open Access routes

Gold Route-Journals

Green Route -Repositories

Pure Open Access Journals Hybrid Open Access Journals

Institutional repositories

Interdisciplinary repositories

Open Access benefits

- Increases research efficiency
- Promotes scholarly rigour and enhances research quality
- Enhances visibility and engagement (more citations!)
- Enables the creation of new research questions
- Enhances collaboration and community building

EC OA-Mandate

FP7 OA Pilot (2008)

- Grant Agreements SC39
- 20% of all programms
- deposit in a repository

Horizon 2020 (2015)

- all Grant Agreements
- •100% of programms
- deposit in a repository
- Open Data Pilot



Open Access in Horizon 2020

"Ensure open access... as soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications"



Horizon 2020 Grant Agreement





What does that mean?

- immediate deposit of peer reviewed scientific publications
 - i.e. journal articles
- deposit in a repository (machine readable form and even Gold OA)
 - respect embargo periods (6 months STEM, 12 months SSH)
- if possible by using an open license
 - e.g. Creative Commons Attribution (CC-BY)
- always acknowledge funding in paper and meta data!
- if possible deposit data



Open Research Data Pilot: Aims

To make the research data generated by Horizon 2020 projects accessible with as few restrictions as possible, while at the same time protecting sensitive data from inappropriate access.



As open as possible, as closed as necessary!





What does that mean?

- deposit the data underlying your scientific publications, including the metadata, documentation and tools needed to validate the results, in a research data repository
- all projects with start date after January 1st 2017 are automatically part of the pilot
- projects with an earlier start date: certain H2020 areas
- sharing more data is encouraged
- write, and keep up-to-date, a Data Management Plan
- opting out fully or in part is possible





AS OPEN AS POSSIBLE, AS CLOSED AS NECESSARY

Grantees have the right to opt-out, but need to say why





Reasons for total or partial opting out

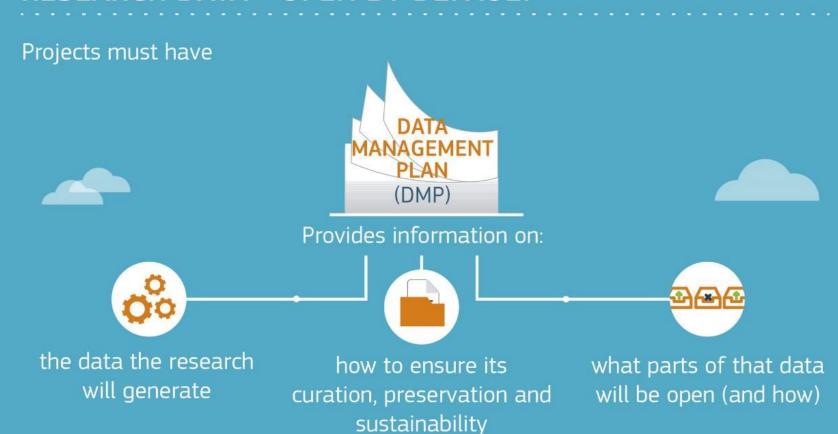
- incompatibility with the Horizon 2020 obligation to protect results if they can reasonably be expected to be commercially or industrially exploited;
- incompatibility with the need for confidentiality in connection with security issues;
- incompatibility with existing rules concerning the protection of personal data;
- if the project does not generate / collect any research data;
- other legitimate reasons

Reasons must be specified in DMP or in amendment to the MGA!





RESEARCH DATA - OPEN BY DEFAULT



What is a DMP?

A DMP is a brief plan to define:

- how the data will be created
- how it will be documented
- who will be able to access it
- where it will be stored
- who will back it up
- whether (and how) it will be shared & preserved

DMPs are often submitted as part of grant applications, but are useful whenever researchers are creating data.

FAIR Data Management guidelines



H2020 Programme

Guidelines on FAIR Data Management in Horizon 2020

Version 3.0



- notes the extension of the pilot
- clarifies concept of FAIR data
- explains what a DMP is and when they should be updated
- notes what happens at proposal, submission and evaluation
- explains costs are eligible (see also art. 6.2.D.3 MGA)
- provides a DMP template

RESEARCH DATA - OPEN BY DEFAULT



A FAIR approach to DMPs

A FAIR approach to DMPs

Findable

- Assign persistent IDs, provide metadata, register in a searchable resource...

Accessible

- Retrievable by their ID using a standard protocol, metadata remain accessible even if data aren't...

Interoperable

 Use formal, broadly applicable languages, use standard vocabularies, qualified references...

Reusable

- Rich metadata, clear licences, provenance, use of community standards...

www.force11.org/group/fairgroup/fairprinciples

H2020 template

- 1.Data summary
- 2.FAIR data
 - 2.1 Making data findable, including provisions for metadata
 - 2.2 Making data openly accessible
 - 2.3 Making data interoperable
 - 2.4 Increase data re-use (through clarifying licences)
- 3. Allocation of resources
- 4. Data security
- 5. Ethical aspects
- **6.**Other issues

[•]http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

Key differences in H2020

- The Commission does **NOT** require applicants to submit a DMP at the proposal stage. It's a deliverable (due by month 6).
- A DMP is therefore NOT part of the evaluation
- optional section on data management in proposal is worth doing, especially to help justify costs
- DMP is a living or "active" document that should be updated whenever important changes occur (or at review times)

Example DMP plans



Example H2020 DMPs in Zenodo

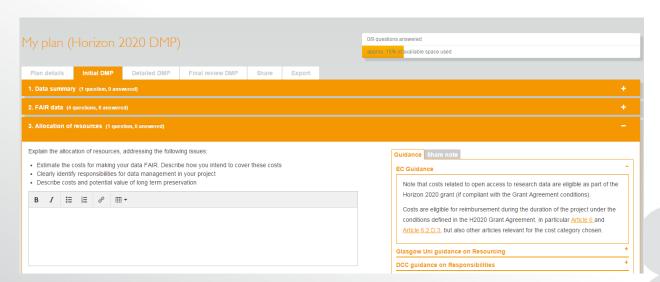
- Helix Nebula High Energy Physics example
- https://zenodo.org/record/48171#.WATexnriF40
- Tweether engineering (micro-electronics) example
- https://zenodo.org/record/55791#.WATei3riF40
- AutoPost ICT example https://zenodo.org/record/56107#.WATefXriF40
- More listed at: <u>www.dcc.ac.uk/resources/data-management-plans/guidance-examples</u>



What is DMPonline?

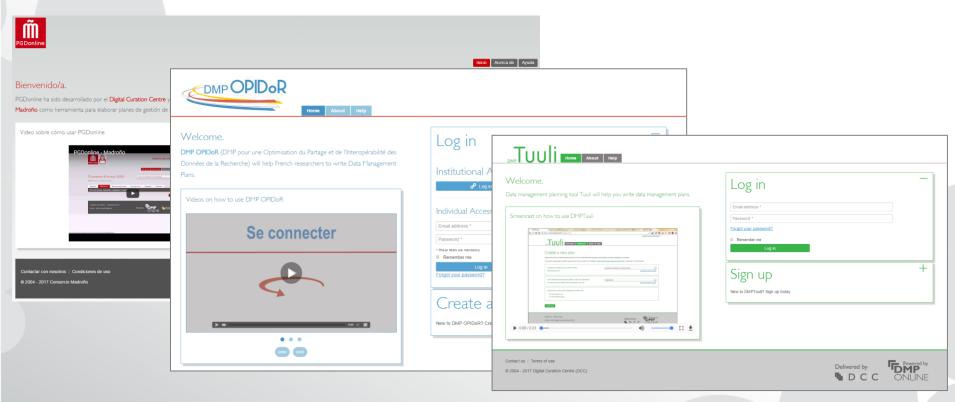
A web-based tool to help researchers write DMPs

Includes a template for Horizon 2020



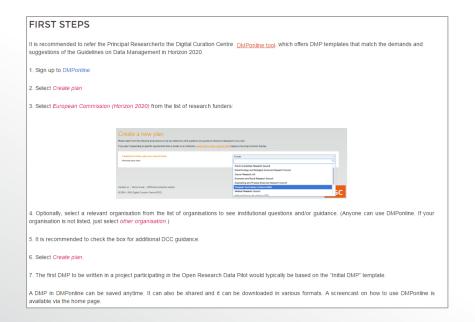
https://dmponline.dcc.ac.uk

National / local DMP Tools



https://github.com/DMPRoadmap/roadmap/wiki/Local-installations-inventory

OpenAIRE guidelines on writing DMPs



https://www.openaire.eu/opendatapilot-dmp



Where to find a repository?

Use an external data archive or repository already established for your research domain to preserve the data according to recognised standards in your discipline. More information for selecting a data repository.

If available, use an institutional research data repository, or your research group's established data management facilities.

Use a cost-free data repository such as Zenodo.

Search resear repository such as Zenodo.

Search for other research data repositories in http://re3data.org/

More information: https://www.openaire.eu/opendatapilot-repository





Zenodo (OpenAIRE/CERN repository)

(All) Research. Shared

– vour one stop research shop!

All research outputs from across all fields of science are welcome! Zenodo accept any file format as well as be positive and negative results. However, we do prom peer-reviewed openly accessible research, and w curate your upload before putting it on the front-

Citeable Discoverable.

be found!

Zenodo assigns all publicly available uploads a Digital

ZEN000 Research. Shared.

Community Collections

- create your own repository

Zenodo allows you to create your own collection and ccept or reject all uploads to it. Creating a space for your ext workshop or project have never been easier. Plus, everything is citeable and discoverable.



Safe

- more than just a drop box!

Your research output is stored safely for the future in same cloud infrastructure as research data from CERN's Large Hadron Collider using a CERN's battle-tested repository software INVENIO used by some of the world's largest repositories such as INSPIRE HEP and CERN Document Server

Reporting

- tell your funding agency!

Zenodo is integrated into reporting lines for research funded by the European Commission via OpenAIRE, Just upload your research on Zenodo and we will take care of the reporting for you. We plan to extend with futher funding agencies in the future so stay tuned!

Flexible Licensing

- not everything is under Creative Commons

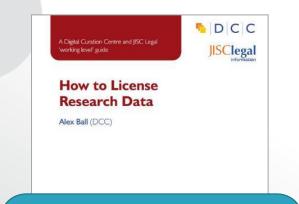
Zenodo encourage you to share your research as openly as possible to maximize use and re-use of your research results. However, we also acknowledge that one size does not fit all, and therefore allow for uploading under a multitude of different licenses and access levels*.

* You are responsible for respecting applicable copyright and license conditions for the files you upload

www.zenodo.org



Licensing research data



Horizon 2020 Open Access guidelines point to:







This DCC guide outlines the pros and cons of each approach and gives practical advice on how to implement your licence

CREATIVE COMMONS LIMITATIONS



NC Non-Commercial What counts as commercial?



ND No Derivatives
Severely restricts use

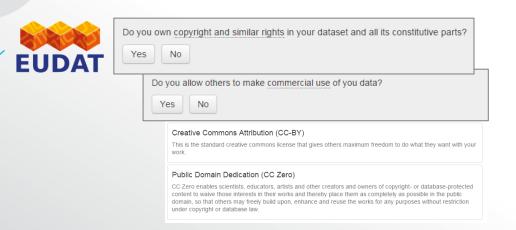
These clauses are not open licenses

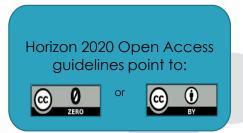
www.dcc.ac.uk/resources/how-guides/license-research-data



Licensing research data and software

EUDAT licensing wizard helps to pick licences for data & software





Candidates should also license Open Access data, or waive rights.



OpenAIRE support materials

Briefing papers, factsheets, webinars, workshops, FAQs

Information on

- Open Research Data Pilot
- Creating a data management plan
- Selecting a data repository
- Personal data

HELPDESK!

https://www.openaire.eu/opendatapilot https://www.openaire.eu/support







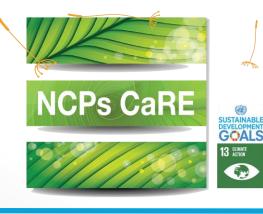
Thank you!

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To request a CLINIQUE contact

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