

Open Access & Open Data

Matteo Di Rosa

**H2020 NCP - Climate Action, Environment, Resource Efficiency and Raw
Materials (SC5)**

**H2020 NCP - Food Security, Sustainable Agriculture and Forestry,
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(SC2)**

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www.apre.it

What is open access?

- The article is universally and freely accessible via the Internet
- The authors retain copyright to their article
- Deposited immediately upon publication, a internationally recognized open access repository (such as PubMed Central).

Milestone definitions of open access include those of the: Budapest Open access Initiative (BOAI) and the Berlin Declaration (October 2003) on Open access

Why open access? The benefits

- **Institutions and authors** gain immediate visibility for their research output
- **Researchers** save time seeking articles they cannot access through their libraries
- **Funding agencies**, universities and research institutions monitor the quality and transparency of the research process
- **Libraries** are potential beneficiaries of open access adoption since it enables them to provide their patrons with increased access to scholarly materials and could help to reduce the amount libraries spend on traditional journal subscriptions

Why open access? The benefits

- **Publishers** who adopt open access may obtain more exposure for their publications.
- **Small and Medium Enterprises (SMEs)** can greatly benefit from immediate and open access to groundbreaking research results to innovate by developing and introducing new products and services and to increase their competitiveness
- Finally, widened and improved transparency of the scientific process and the consequent access to knowledge leads to more **science-literate citizens**, better capable of thriving in the complexities of the 21st century.

Why open access?

Communication 'ERA'

The ERA is based on the internal market in which researchers, scientific knowledge and technology circulate freely

Five priority areas:

- More effective national research systems
- Optimal transnational cooperation and competition
- An open labour market for researchers
- Gender equality and gender mainstreaming in research
- Optimal circulation, access to and transfer of scientific knowledge



Joint statement by stakeholders organisations

**Formal commitments and activities on open access by:
EARTO, NordForsk, Science Europe, LERU and EUA (+CESAR)**

The Commission objective

- The Commission wants to optimise the impact of publicly-funded scientific research
 - At European level (FP7, Horizon 2020)
 - At Member State level
- → One way to get there: **open access**
- Expected benefits:
 - Results of publicly funded research can be disseminated more broadly and faster for the benefit of researchers, industry and citizens
 - Equal access across Europe and beyond
 - Drive down the costs of dissemination without sacrificing quality

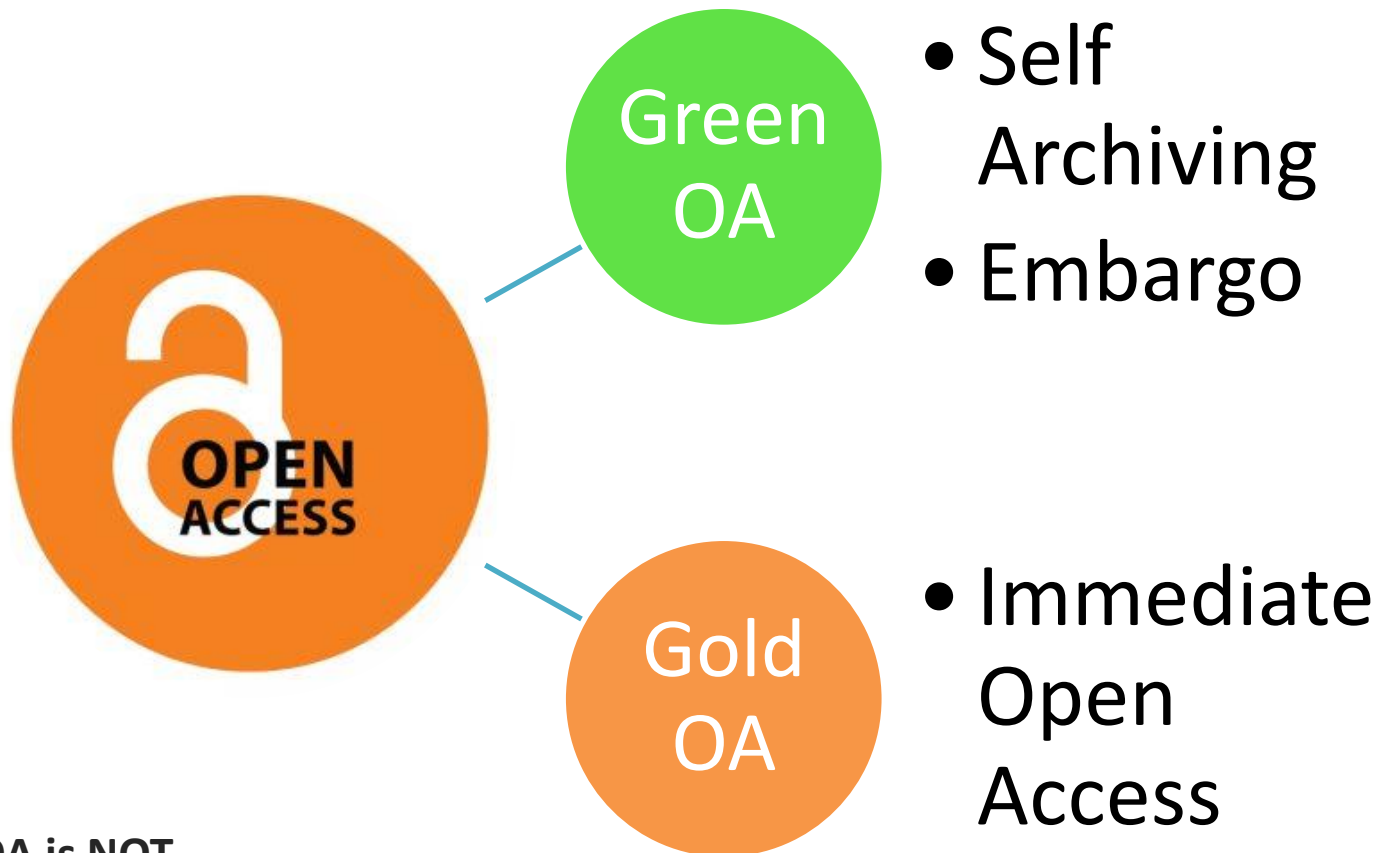


The European Commission is a...

- **Policy maker**
 - Proposes EU legislation
 - Legislates with other EU institutions
 - Invites Member States to act
- **Funding agency**
 - Sets access and dissemination rules for EC-funded research
 - Research Framework Programmes (next: Horizon2020)
- **Capacity builder**
 - Funds infrastructure projects relevant for open access and Digital Science
 - Funds projects that support EC policy



The two roads of the OA?



WHEN OA is NOT

Not an obligation to publish

Not at odds with patenting

OA publications go the same peer review process

Open Access in H2020

- Open access mandate in H2020
 - Obligation to provide OA to publications
 - All areas
 - Peer-reviewed publications
 - Allowed embargos: 6/12 months
 - Green and Gold OA supported
 - Beneficiaries must aim to deposit the research data needed to validate the results presented in publications ('underlying'/'linked' data)

OA to publications: H2020 mandate (1)

Each beneficiary must ensure OA to all peer-reviewed scientific publications relating to its results:

- Deposit a machine-readable copy of the published version
- final peer-reviewed manuscript accepted for publication in repository of the researchers choice (possibly OpenAIRE compliant)
- Ensure OA on publication or at the latest within 6 months
 - (12 for SSH)
- Aim to deposit at the same time the research data needed to validate the results ("underlying data")
- Ensure OA to the bibliographic metadata that identify the deposited publication, via the repository

OA to publications: H2020 mandate (2)

Routes towards OA:

- OA publishing and self-archiving considered valid and complementary routes
- Deposit into a repository also in the case of OA publishing

Costs for OA publishing:

- Eligibility of OA publishing costs during the grant (as in FP7)
- Piloting a mechanism for open access publishing after the end of the grant agreement (call EINFRA-2-2014 – eInfrastructure for Open Access)

Licencing:

- Encouragement to authors to retain their copyright and grant adequate licences to publishers (e.g. Creative Commons)

Self-archiving (the Green OA)



The author archives an electronic copy of a peer-reviewed publication (author final copy or publisher copy) in an institutional or subject repository at the time of publication, after which it is freely available to everybody under specific license.

- A repository is an online database operating under specific technical standards that allows the institution to manage, preserve, disseminate, showcase its scientific output.
- The repository is a valuable tool in an institution's research information system and evaluation process, and one that offers added value services for the scientific community.

Open access publishing (the Gold OA)



Authors publish their scholarship in open access journals or monograph series. These publications are freely available to the end users on the Internet.

- Copyright is usually retained by the authors.
- Open access publications follow the same processes as toll access publications (i.e. peer review), but provide open access to the content of the publications.
- There is no correlation between the quality of a publication and the access to it.
- Open access publishing often entails costs (author processing fees), usually covered by funders/employers.
- Open access publishing has led to new business models in scholarly publishing

Self-archiving and publishing

Self-archiving and Open access publishing are **NOT** the same thing, but complementary

- Purpose of self-archiving is to curate one's scientific output in the repository and provide access to them
- Gold open access is a mode of publishing and follows the processes of publishing

Open Research Data Pilot

- Areas of the 2014-2015 Work Programme participating in the Open
- Research Data Pilot are:
 - Future and Emerging Technologies
 - Research infrastructures – part e-Infrastructures
 - Leadership in enabling and industrial technologies – Information and Communication Technologies
 - Societal Challenge: Secure, Clean and Efficient Energy – part Smart cities and communities
 - Societal Challenge: Climate Action, Environment, Resource Efficiency and Raw materials – except raw materials
 - Societal Challenge: Europe in a changing world – inclusive, innovative and reflective Societies
 - Science with and for Society
- Projects in other areas can participate on a voluntary basis.

Pilot on Open Research Data (2)

Types of data concerned:

- Data (including associated metadata) needed to validate the results presented in scientific publications ("underlying data")
- Other data (including associated metadata) as specified in data management plan

Beneficiaries participating in the Pilot will:

- Deposit this data in a research data repository of their choice
- Take measures to make it possible to access, mine, exploit, reproduce and disseminate free of charge (using e.g. Creative Commons licences)
- Provide information about tools and instruments at the disposal of the beneficiaries and necessary for validating the results (where possible, provide the tools and instruments themselves)

Support & monitoring to be developed

Pilot on Open Research Data (3)

Projects may opt out of the Pilot on Open Research Data in Horizon 2020 in a series of cases:

- If the project will not generate / collect any data
- Conflict with obligation to protect results
- Conflict with confidentiality obligations
- Conflict with security obligations
- Conflict with rules on protection of personal data
- If the achievement of the action's main objective would be jeopardised by making specific parts of the research data openly accessible (to be explained in data management plan)

Data Management Plan in Horizon 2020

Data Management Plans (DMPs) mandatory for all projects participating in the pilot (deliverable within the first six months)

- Other projects invited to submit a DMP if relevant for their planned research DMP questions:
- What data will be collected / generated?
- What standards will be used / how will metadata be generated?
- What data will be exploited? What data will be shared/made open?
- How will data be curated and preserved?

FP7 post-grant OA publishing funds pilot

- The European Commission has launched the FP7 Post-Grant Open Access Pilot earlier this year, <https://www.openaire.eu/postgrantoapilot>, to fund Open Access publishing fees for publications arising from finished FP7 projects through the OpenAIRE project. As well as for Book Processing Charges, this Pilot provides funding for Open Access Article Processing Charges (APCs) for FP7 projects up to two years after they end.
- This FP7 Post-Grant Open Access Pilot provides an additional instrument to improve access to research results from FP7 projects, but does not affect authors' choice on how their project publications are made Open Access.

Where can I find more information?

- Horizon 2020:
 - <http://ec.europa.eu/programmes/horizon2020/>
- Participant Portal:
 - <http://ec.europa.eu/research/participants/portal/>
- Guidelines on Open Access to Scientific Publications and Research Data in Horizon 2020:
 - http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilot-guide_en.pdf
- Guidelines on Data Management in Horizon 2020:
 - http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf
- Open access (Science in Society site):
 - http://ec.europa.eu/research/science-society/open_access
- Open access (Digital Agenda site):
 - <http://ec.europa.eu/digitalagenda/en/open-access-scientific-knowledge-0>
- OpenAIRE:
 - <http://www.openaire.eu/>