

From open access to open science Policies of the European Commission

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This presentation

- 1. Open Science
- 2. Open Access in the FPs
- 3. The Recommendation for Access to and Preservation of Scientific Information and its Revision
- 4. The Revision of the PSI Directive
- 5. OA in the MS- the NPR Report

OPEN SCIENCE

Open Research Fund: applications submitted

Here you can see a list of eligible applications to the Open Research Fund in 2018, including project proposals.















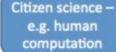




Citizen science - e.g. sensors

Data gathering







Collaborative analysis

(citizen science, open

collaboration

Open code



Altmetric





DIRECTORY OF

OPEN ACCESS

JOURNALS

MENDELEY





Blogs

Reputation

systems

Open

annotation

Peer review (pre and post

Conceptualisat

Publishing results/data publication)

Liquid/ nanopublications









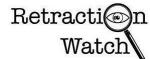






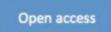












Elaboration based on Open to All? Case studies of openness in research, NESTA & RIN report, 2010







How to describe Open Science?

There are many definitions but maybe Open Science is:

 A system of practices that moves towards a more open, collaborative, data-intensive and networked way of doing research and sharing research results, enabled by developments in ICT and related infrastructures and the increasing proliferation of data.

Or Open Science is:

- Just science done right!
- Excellent science!





Why promoting Open Science?

For citizens and policy makers

- More transparency of the science system: the public taxpayer has this right and it can only enhance the quality of science
- Fit for 21st century science purpose: all grand societal challenges need cross disciplinary research
- Faster circulation of new ideas: in the academia and beyond facilitated access for SMEs
- Better ROI of the R&I investments: if all the results of our public research are made reusable, more productive use follows by default

For researchers:

- Wider dissemination and sharing of their results
- More visibility and credit for what happens before an article get published
- New career paths e.g. data scientists, start-ups, science diplomacy



Is Open Science making science better?

- ✓ less hierarchical by the higher level of inclusion of citizens (citizen science, crowdfunding, open innovation);
- √the real science commons by sharing data, methods, tools and outcomes;
- √transparent by the ex ante and ex post open and inclusive process
 of peer-review; and
- ✓ replicable owing to shareable methods, tools and data

Or just closer to the Mertonian ideo-typical CUDOS?

Open Science a top level policy priority





"As I see it, European success now lies in sharing as soon as possible, (...). The days of **open science** have arrived."

"Presidency Conference Open Science", Amsterdam, April 4th, 2016

Open Innovation
Open Science
Open to the World



Enablers

- policy measures,
- individual practiceof scientists,
- and new infrastructure and services.





EC as a research funder (Horizon 2020/Europe):

Obligations on Open Access, open data, FAIR and DMPs INFRAEOSC Call in WP 2018-2020

EC as a regulator (DSM):

Revised PSI directive (2018)

Recommendation on scientific information (2018)

EC as policy maker:

Open Science Policy Platform (OSPP) to co-develop the European Open Science Agenda with stakeholders

European Cloud Initiative (2016)

Implementation Roadmap for the EOSC (2018)



8 policy priorities agreed in 2016

HOLISTIC POLICY AGENDA SCOPE & AMBITIONS

Four with regard to the use & management of research results and data

- ✓ Open Data: FAIR data sharing is the default for funding scientific research
- ✓ <u>Science Cloud</u>: All EU researchers are able to deposit, access and analyse European scientific data through the open science cloud, without leaving their desk
- ✓ <u>Altmetrics</u>: Alternative metrics (next generation metrics) to complement conventional indicators for research quality and impact (e.g. Journal Impact Factors and citations)
- ✓ Future of <u>scholarly communication</u>: All peer reviewed scientific publications are freely accessible____



8 policy priorities agreed in 2016

HOLISTIC POLICY AGENDA SCOPE & AMBITIONS

Four with regard to relations with <u>research actors</u> (researchers, institutions and funders)

- ✓ <u>Rewards</u>: The European research career evaluation system fully acknowledges Open Science activities
- ✓ <u>Research Integrity</u>: All publicly funded research in the EU adheres to commonly agreed Open Science Standards of Research Integrity
- ✓ <u>Education and skills</u>: All young scientists in Europe have the necessary skills and support to apply Open Science research routines and practices
- ✓ <u>Citizen Science</u>: Citizens significantly contribute and are recognised as valid knowledge producers of European science

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The evolution of the EU funding programmes for R&I

2008

FP7

OA Pilot

Deposit and open access

2014

H2020

OA Mandatory

Deposit and open access

& ORD/DMP Pilot

2017

H2020

OA Mandatory

Deposit and open access

& ORD/DMP by default (opt-out)

2020

Horizon Europe

OA Mandatory

Deposit and open access

DMP + FAIR data **Mandatory**

OD by default (opt-out)

& Open Science embedded





Open Science across the programme

Open Science

Will ensure better exploitation of R&I results, increase the innovation potential of results and support the active engagement of society

- Mandatory Open Access to publications: beneficiaries must ensure the existence of sufficient rights to comply with open access requirements
- Mandatory Data Management Plan for FAIR (Findable, Accessible, Interoperable, Re-usable) and Open Research Data: the norm for all research data with possibilities to opt-out from open access requirements

Horizon Europe will support researcher skills and reward systems for open science. Certain work programmes may require additional open science practices and the use of European Open Science Cloud.

GETTING FURTHER



"PLAN S TOWARDS FULL OPEN ACCESS"



Congratulations to #cOAlitionS research funders for their commitment to making #OpenAccess a reality by 2020. The @EU_Commission will coordinate with #cOAlitionS research funders the implementation of the principles in #PlanS ---> europa.eu/!hw84rX



Plan S

Accelerating the transition to full and immediate Open Access to scientific publications

"After 1 January 2020 scientific publications on the results from research funded by public grants provided by national and European research councils and funding bodies, must be published in compliant Open Access Journals or on compliant Open Access Platforms." **Adopted**

25/4/2018







Public sector and publicly funded data

Private sector data

Research data

Proposal for a revision of the Directive on the reuse of public sector information

Draft Guidance on private sector data sharing in B2B and B2G contexts Update 2012
Recommendation
on access to and
preservation of
scientific
information

2018 DATA PACKAGE

Different policy instruments for different types of data

#dataeconomy #opendata



The original Recommendation of 2012

A soft law measure

Part of <u>package</u> that contained measures to improve and harmonize access to scientific information produced in Europe (incl. Horizon 2020)

<u>Key principle</u>: bring coherence between the national environment of researchers 'at home' and the EU Framework Programme(s)

Creation of the European Commission Expert Group on National Points of Reference on Scientific Information (NPR) – 2nd report for period 2014-2016

A valuable and impactful instrument for policy making used and referred to by many Member States in their national strategies and action plans



The revised Recommendation of 2018

Still a soft law measure

Title unchanged

Technical update required to fit today's standard research practices bases on Open Science (OS), and to reflect the most recent developments in EU policies

Announced in <u>European Cloud Initiative</u> (COM(2016) 178 final)

Discussion at the <u>5th meeting</u> of the EC Expert Group on National Points of Reference (NPRs) in December 2017

Joint exercise DG CONNECT & DG RTD

Interservice Group and interservice consultation



The revised Recommendation of 2018

Open access to scientific publications

Management of research data including open access (2012: open access to research data)

Preservation and re-use of scientific information

Infrastructures for open science (2012: e-infrastructures)

Skills and competences new**

Incentives and rewards new**

Multi-stakeholder dialogue

Structured coordination and follow-up



What the "Data Package" contains

A "chapeau" Communication [COM(2018)232];

I) More Open (government) Data:

A proposal for a recast of the Public Sector Information Directive 2003/98/EC – COM(2018)234);

II) More "sharing" of private sector data:

"Principles" on business-to-business data transfers (with a focus on IoT data) (in COM (2018)232);

"Principles" on access for public bodies to private sector data (in COM (2018)232);

Technical guidance on sharing of private sector data (<u>SWD(2018)125 final</u>) Evaluation of the Database Directive

II) More Open Access:

An update of the Recommendation to MS on Open Access;



Article 10:Availability and re-use of research data

- 1. Member States shall support the availability of research data **by adopting national policies and relevant actions** aiming at making publicly funded research data openly available ('open access policies'). These open access policies shall be addressed to research performing organisations and research funding organisations.
- 2. Research data **shall be re-usable** for commercial or non-commercial purposes under the conditions set out in Chapters III and IV, insofar as they are **publicly funded** and whenever access to such data is provided through an institutional or subject-based repository. In this context, legitimate commercial interests and pre-existing intellectual property rights shall be taken into account. This provision shall be without prejudice to point (c) of Article 1(2)





Open Science Across Europe: the NPR report

"Structured coordination of MS at EU level & follow-up of the 2012 Recommendation"

→ NPR (28 MS + NO, TR, CH)

"Reporting on the follow up of this Recommendation"

- → 1st report (2015)
- → 2nd report (2018) new**



Access to and Preservation of Scientific Information in Europe

Report on the implementation of Commission Recommendation C(2012) 4890 final

Edited by Victoria Tsoukala, Maarja Adoojan, Jean-François Dechamp May 2018





ORE publishing platform

- ✓ Help H2020 beneficiaries and their researchers comply with the open access mandate without paying APCs during and after the grant
- ✓ **Improve uptake** of Open Access in H2020
- ✓ Promote Open Access as THE mode for publishing from now on
- ✓ Support open science and lead by example
- ✓ Promote early sharing of research (pre-prints + peer-reviewed articles)
- ✓ Promote open peer-review+ post publication commenting
- ✓ Experiment with new generation metrics
- ✓ Explore business models in OA publishing and sustainability

Tenders are under evaluation



Thank you for your attention

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