

# EU policy on Open Acces: current initiatives and next steps

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# **The policy context: Open Science**



= Systemic transition of the science system which affects the way

**Open Science** 

- research is performed
- knowledge is shared/diffused/preserved
- research projects/results are evaluated
- ts research is funded
  - researchers are rewarded
  - •future researchers are trained

Affecting the whole research cycle and all its stakeholders



# Why is Open Science so important?

**It's good for science:** efficiency, verifiability, transparency, inter-disciplinarity

It's good for the economy: access to and re-use of scientific information by industry, innovation

It's good for society: broader, faster, transparent & equal access for citizens, increased societal impact of science and research



### **Open Science is:**

- Just science done right!
- Excellent science!



Stickers: Melanie Imming, ImmingImpact



# Scope & ambitions by 2020

# Use & management of research results and data

- ✓ Open Data
- ✓ European Open Science Cloud
- ✓ Altmetrics
- ✓ Future of scholarly communication

R<u>esearch actors</u> (researchers, institutions and funders)

- ✓ Rewards
- ✓ Research Integrity
- ✓ Education and skills
- ✓ Citizen Science



## Who are we?

### A policy maker

- We propose EU legislation
- We legislate with other Community institutions (European Parliament, Council...)
- We invite Member States to act

### A funding agency

• We set our own rules for EC-funded scientific research and innovation

### A capacity builder

• We fund projects that support our policy





# **Open Science in FPs**



## **Open Access to scientific publications**



### Scientific publications in H2020 (Art. 29.2 MGA)

# Mandatory open access to peer-reviewed publications through repositories

What to do? Deposit + open access



#### Subscription Publisher

Paper has been accepted in peerreviewed venue, has been PRed and fully edited

> -watch the contracts you sign with publishers- you can negotiate!

-make sure you can deposit

Deposit final author copy or publisher pdf in repository at the same time as publication

-at your institutional repository or appropriate subject repository or zenodo

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Provide open access through repository at same time as publication

> -max. acceptable embargo: 6/12 months (STEM/SSH)

## Open access Publisher

Paper has been accepted in open access peerreviewed venue and is published directly in open access by publisher

> -you may need to pay fee (APC) or not (most journals don't charge)

-DOAJ.org

Deposit final author copy or publisher pdf in repository at the same time as publication

> -at your institutional repository or appropriate subject repository or zenodo

Provide open access with a link from the repository to publisher's site

> -no embargo here, since journal is open access



# **Open Access to research data**



### **Research data in H2020** (Art. 29.3 MGA) *a.k.a. the Open Research Data Pilot (ORD)*

### Not so much a pilot any more! By default in!

• unless exception in WP

### **Addresses several things at once:**

- Streamlining Research Data Management (RDM) as a standard practice through Data Management Plans (DMPs)- required as deliverable
- Open access to research data- as open as possible, as closed as necessary!

# Costs for open access to research data fully eligible during the duration of the project







## Some misconceptions.....

# about Horizon 2020 and OA



# "H2020 is forcing me to publish!"





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The decision whether to publish through open access comes after the more general decision on whether to publish directly or to first seek protection.



It is important to stress that open access publications undergo the same kind of peer review process as subscription publications.







# "H2020 is forcing me to disclose all of my data!"





## Resources



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#### > H2O2O Online Manual > Cross-cutting issues > Open access & Data management >

Open access

Data management

#### Open access & Data management

Europe These pages guide you through

- context and rules on open access covering beneficiaries in projects funded or co-funded under Horizon 2020 and
- data management under Horizon 2020 for applicants and beneficiaries who take part in the pilot on open access to research data

#### What Is Open Access (OA)?

Open access can be defined as the practice of **providing on-line access to scientific information that is free** of charge to the reader. In the context of R&D, open access typically focuses on access to 'scientific information' or 'research results', which refers to two main categories:

· Peer-reviewed scientific research articles (primarily published in academic journals)

Research data

More details about Horizon 2020 provisions for open access to publications and data is given below.

#### **OPEN ACCESS TO PUBLICATIONS**

Under Horizon 2020, each beneficiary must ensure open access to all peer-reviewed scientific publications relating to its results.

Beneficiaries can freely choose between the most appropriate route towards open access for them:

- Self-archiving (also referred to as 'green' open access) means that a published article or the final
  peer-reviewed manuscript is archived (deposited) in an online repository before, alongside or after its publication.
  Repository software usually allows authors to delay access to the article ('embargo period') If this route is chosen
  beneficiaries must ensure open access to the publication within a maximum of six months (twelve months for
  publications in the social sciences and humanities).
- Open access publishing (also referred to as 'gold' open access) means that an article is immediately
  provided in open access mode (on the publisher/journal website). Publishers sometimes charge so called Article
  Processing Charges (or APCs) to make articles open. Such costs are eligible for reimbursement during the
  duration of the project as part of the overall project budget.

Furthermore, the EU funded pilot project **OpenAIRE** (Open Access Infrastructure for Research in Europe) currently provides support for open access costs incurred **after the end of the grant**. This also **applies to FP7** projects. In the case of gold open access publishing, open access must be granted at the latest on the date of publication and vc

#### **Reference documents**

- Guidelines to rules on Open Access to Scientific Publications & Open Access to Research Data in Horizon 2020
  - Guidelines on the Implementation of Open Access to Scientific Publications & Research Data in projects supported by the European Research Council under Horizon 2020
  - Guidelines on Data Management in Horizon 2020
  - Template for the Data Management Plan [ODT format]
  - Template for the Data Management Plan. Annotated version for participants under Societal Challenge 1
  - ERC template for the Data Management Plan [ODT format]
  - · Scope of pilot indicated in the introduction to the Horizon 2020 Work Programme
  - H2020 Annotated Model Grant Agreement Open access to scientific publications
  - · H2020 Annotated Model Grant Agreement Open access to research data

#### Related links

- European Commission Open Access Policy (Open Science)
- OpenAIRE Open Access Infrastructure for Research in Europe
- European IPR Helpdesk factsheet "Publishing vs. patenting"

RES	EARCH & INNO	OVATION		
Commission Parti	icipant Portal H2020	) Online Manual		ເ⊖⊜
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020 Online Manual				
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🚍 Find a call				
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What you need to know about Horizon 2020 calls	Grant management			
Find partners or apply as individual	Keeping records	Amendments	Reports & payment re	quests Deliverables
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> Ethics review				

### Participant Portal H2020 Online Manual

http://ec.europa.eu/research/participants/doc s/h2020-funding-guide/index\_en.htm



# Still many challenges ahead!

### **Open access to publications**

- Increasing uptake to 100%
- Reinforcing monitoring and incentives/'sanctions'
- Hybrid journals and other financial issues (caps, postgrant etc.)

### **Open access and research data**

- The DMPs!
- Mainstreaming FAIR data across the FPs
- Stimulating a change in scientific culture



## What about FP9?



### FP9 goes beyond OA (publications & data)

### to embrace & incentivise Open Science as modus operandi for science

### Open Science in Horizon Europe



- Clarifies and strengthens the **OA obligations**;
- Empowers the authors of scientific publications;
- Is home of **FAIR data sharing** while complying with IPR rules and exploitation obligations set in the GA;
- Encourages Open Access to other research output;
- Promotes compliance with 'Open Science principles' through a combination of obligations and incentives;
- Implements sanctions for those beneficiaries that repeatedly and consistently fail to provide the required open access, requiring institutions to assume responsibility for their intellectual output;
- Introduces the use of **'new generation' metrics** for better assessing the impact of research output and the engagement in Open Science.



# **Articles setting Open Science obligations in Horizon Europe**

Article 2 defines open science

**Article 10** sets the obligations for Open Science with regard to Open Access, RDM, FAIR and other open science practices

**Article 35** foresees further obligations in terms of IPR, Data Management Plans, FAIR and use of European Open Science Cloud and certain exceptions ("as open as possible as closed as necessary")



# Article 2 (4a) Open Science

'open science' means a new approach to the scientific process based on cooperative work and new ways of diffusing knowledge by using digital technologies and new collaborative tools



### **Article 10: Open Science**

1. <u>Open access to scientific publications</u> resulting from research funded under the Programme shall be ensured in accordance with Article 35(3). <u>Open access to research data</u> shall be ensured in line with the principle 'as open as possible, as closed as necessary'. Open access to other research outputs shall be encouraged.

2. <u>Responsible management of research data</u> shall be ensured in line with the principles 'Findability', 'Accessibility', 'Interoperability' and 'Reusability' (<u>FAIR</u>).

3. <u>Open science practices</u> beyond open access to research outputs and responsible management of research data shall be promoted.



## **Article 35: Exploitation and dissemination**

3. Beneficiaries shall ensure that open access applies to scientific publications under the terms and conditions laid down in the grant agreement. In particular, the beneficiaries shall ensure that they or <u>the authors retain sufficient intellectual</u> <u>property rights</u> to comply with their open access requirements.

<u>Open access to research data shall be the general rule</u> under the terms and conditions laid down in the grant agreement, but <u>exceptions shall apply if justified</u>, taking into consideration the legitimate interests of the beneficiaries and any other constraints, such as data protection rules, security rules or intellectual property rights.

The work programme may provide for additional obligations to adhere to open science practices.



# Article 35: Exploitation and dissemination

4. Beneficiaries shall manage all research data in accordance with the terms and conditions laid down in the grant agreement and shall <u>establish a Data Management Plan (DMP)</u>.

The work programme may provide for additional obligations to use the <u>European Open Science Cloud</u> for storing and giving access to research data.

### **Plan S**





Following

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I very much welcome and support today's launch of 'Plan S' and #cOAlitionS - a coalition of national research funders, w/ @EU\_Commission's support - who have committed to accelerate the transition to open access of scientific publications. #OpenScience

#### → europa.eu/!hw84rX



9:01 AM - 4 Sep 2018 from Brussels, Belgium





### **Proposed** Implementation of Plan S in HE

- Publication in hybrid journals: not to be funded (already announced in Horizon Europe's Impact Assessment)
- Open access via repositories: embargoes not to be accepted (now 6/12 months accepted)
- **Copyright retention and open license:** copyright retention already in the HE Regulation. Open license to be required in MGA
- Reinforcement of the requirements of journals, platforms and repositories: in line with the « compliance » requirements of Plan S



But...



# We do more than funding research!

- European Open Science Cloud
- Open research publishing platform
- EC data package

### The Vision for EOSC



- EOSC will provide 1.7m EU researchers an environment with free, open services for data storage, management, analysis and re-use across disciplines
- EOSC will join existing and emerging horizontal and thematic data infrastructures, bridging todays fragmentation and ad-hoc solutions
- EOSC will add value (scale, datadriven science, inter-disciplinarity, faster innovation) and leverage past infrastructure investment (10b per year by MS, two decades EU investment)



### **Governance framework**



### Three layer structure



EOSC Board of MS/AC and EC representatives to ensure effective supervision of EOSC implementation

> Working Group of the strategic configuration of the Programme Committee

Executive Board of stakeholder representatives to help ensure proper EOSC implementation and accountability

> Commission expert group

Stakeholder Forum to provide input from a wide range of actors

> Self-organised with EC support



# The Open Research Europe 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 OA in H2020
- Promote OA as THE mode for publishing from now on
- Support open science and lead by example
  - ✓ Early sharing of research (pre-prints + peer-reviewed articles)
  - ✓ Open peer-review+ post publication commenting
  - ✓ New generation metrics
- Explore business models in OA publishing and sustainability
- Non-award decision- New call to be published







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



# **Thank you!**

Mail: <u>RTD-open-access@ec.europa.eu</u> Web: <u>ec.europa.eu/research/openscience/</u>

