



---

# Making open the default

## Funders in Europe incentivizing Open Science



Vanessa Proudman, Director, SPARC Europe  
Munin Conference, 28 Nov 2019



COMMENT · 24 OCTOBER 2018

<https://www.nature.com/articles/d41586-018-07101-w>

# Do authors comply when funders enforce open access to research?

*The first large-scale analysis of compliance with open-access rules reveals that up to one-third of articles are not free to read, report Vincent Larivière and Cassidy R. Sugimoto.*

Vincent Larivière & Cassidy R. Sugimoto 



# The RIF Project

- \* Sept 2018 – Aug 2019
- \* **Goal:** Help achieve a growth in the number of Open Access and Open Science policies amongst funders in Europe, and help strengthen existing policies



# RIF Project: Objectives

- \* Gain a greater **understanding** of current and planned Open Access and Open Science **policies and practices**
- \* Raise awareness, amongst funders, of **existing rewards & incentive structures** that are supporting OA and OS, as well as **gaps** so as to inspire further Open research policy development in Europe
- \* **Support the implementation of Plan S**

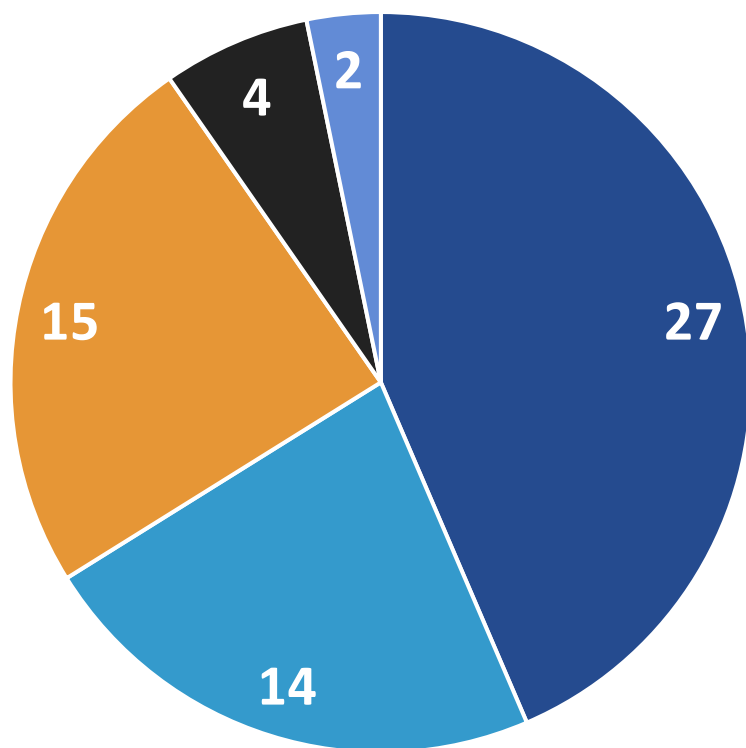
# Process

- \* Establishment of an advisory group
- \* Scoping exercise
- \* Development of questionnaire
- \* Survey - Spring 2019
- \* Report - 30 Sept 2019

\* [https://zenodo.org/record/3401278#.Xd-WRpNKiT\\_](https://zenodo.org/record/3401278#.Xd-WRpNKiT_)



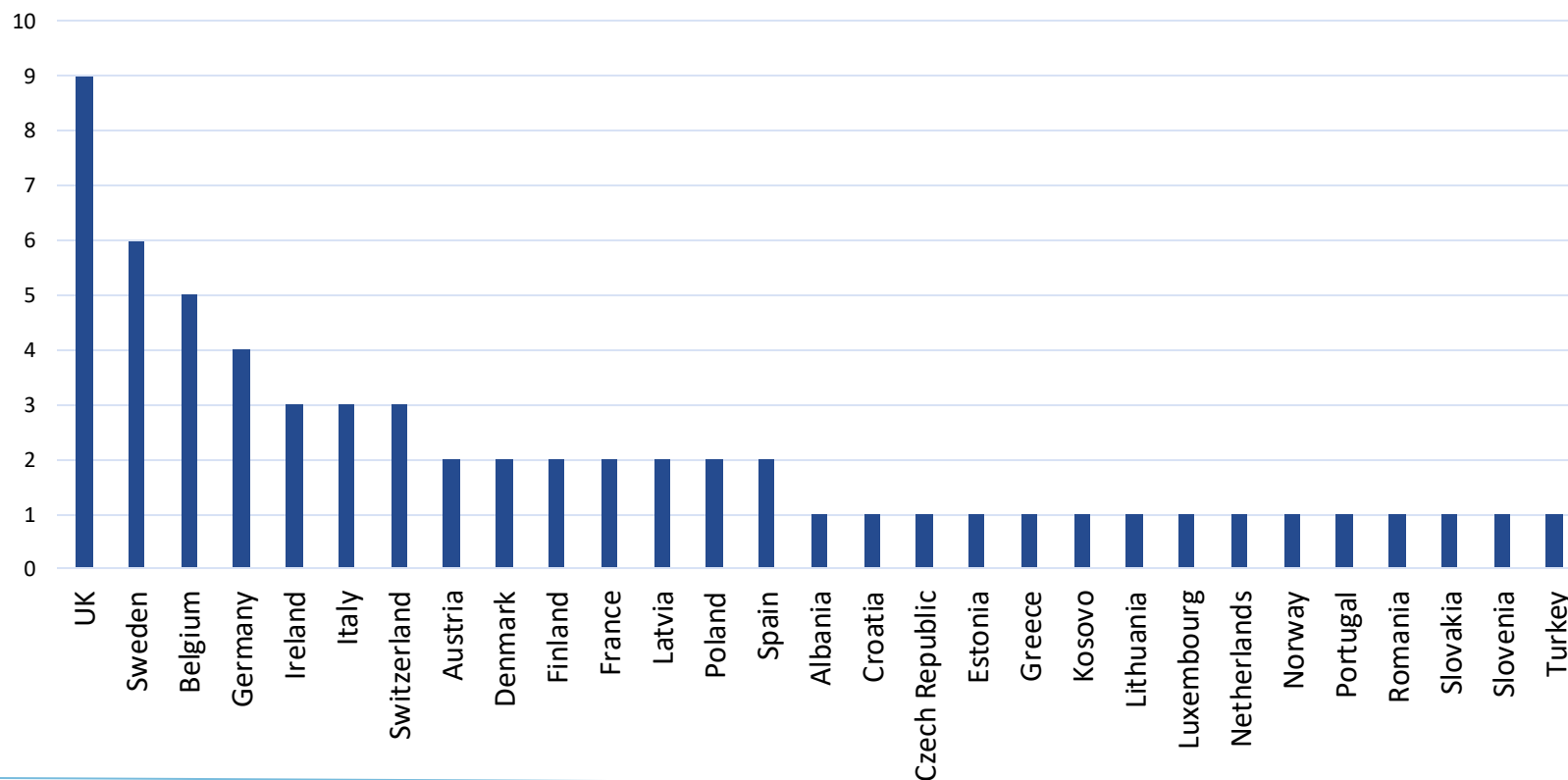
# Survey respondents by org type: n62



- national funding agency
- foundation / trust / philanthropic organisation
- national academy
- NGO / charity
- international funding agency

# Respondents by geographical location

from Norway: The Research Council of Norway



---

# Study conclusions

## 8 considerations for funders

1. Encourage more funders to
  - a) adopt Open Access and research data policies
  - b) strengthen current policies
2. Seek to close the gap on policies in all countries in the European region
3. Analyse the degree to which one's policy matches with other commitments to Open
4. Increase support for OS infrastructure



---

# Study conclusions

## 8 considerations for funders

5. Consider reviewing APC expenditure and urge publishers to make cost structures transparent and reduce APCs
6. Do more to stimulate the re-use of the research funders fund
7. Consider more open access in your evaluation process
8. Monitor more closely for policy compliance and establish enforcement strategies

# Key national OS policies

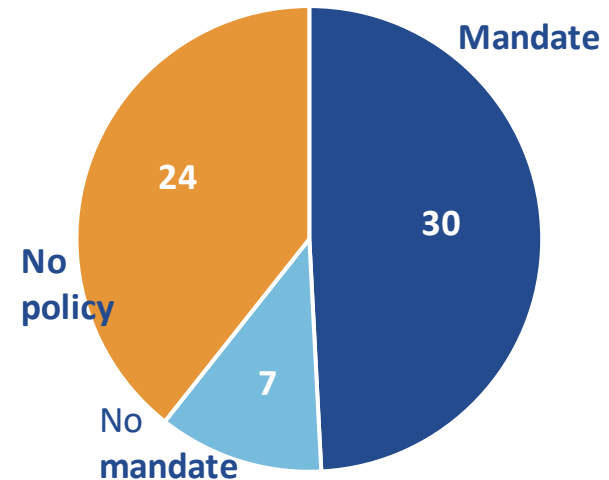
- \* Cyprus
- \* Czech Republic
- \* Denmark
- \* Finland
- \* France
- \* Ireland
- \* Netherlands
- \* Slovenia
- \* Slovak Republic
- \* Spain
- \* UK

# Encourage more OS policy development

## 1. Encourage more funders to

### a) adopt Open Access and research data policies

- 37 with an **OA** policy:  
30 mandates
- 24 no OA policy;  
50% of those developing  
one

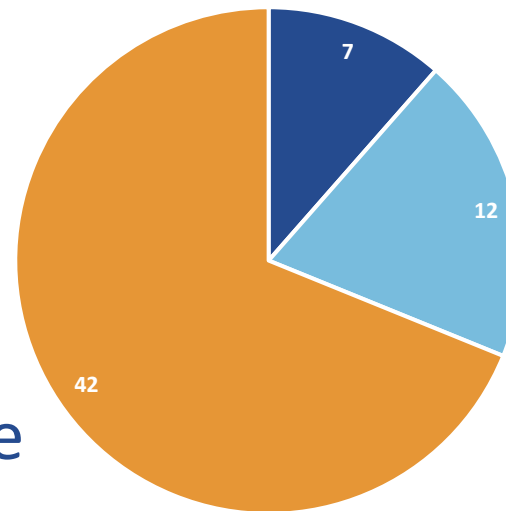


# Encourage more OS policy development

## 1. Encourage more funders to

a) adopt Open Access and research data policies

– 42 no **research data** policy



7, as part of a broader OA policy

12, separate RD policy

42, No

– 13 developing one

# Encourage more OS policy development

## 1. Encourage more funders to

### b) strengthen current policies

- 15 OA policies reviewed in last 3 years; 11 in last 12m
- Topics for the future: Monitoring (25), embargos (18), eligible journals (16), APC capping (15), licensing (12) & funding publication costs (11)

# Matching policy with practice: OA

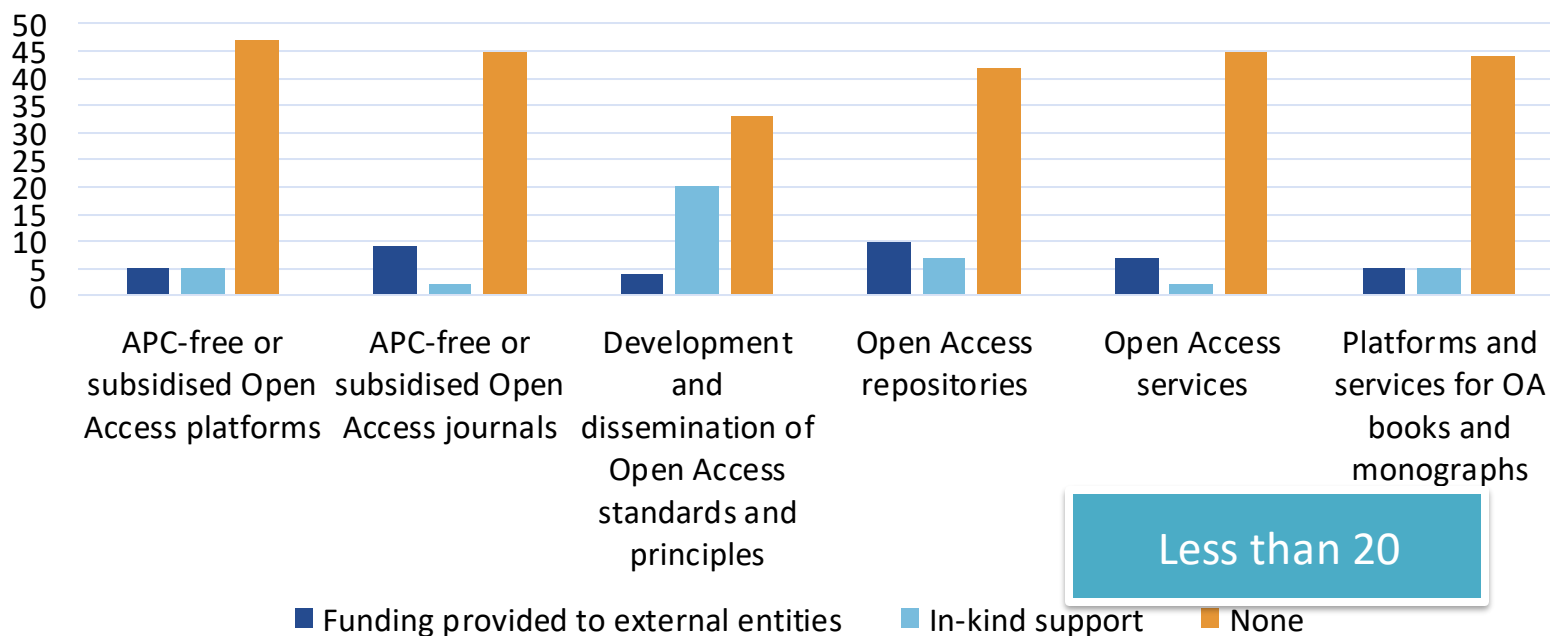
## 2. Analyse the degree to which one's policy matches with other commitments to Open

- Investment in OA journals / platforms
- Investment in RD
- Investment in infra
- Evaluation criteria

# More support for OS infra: OA

## 4. Increase support for OS infrastructure

Support provided to Open Access initiatives by all funders



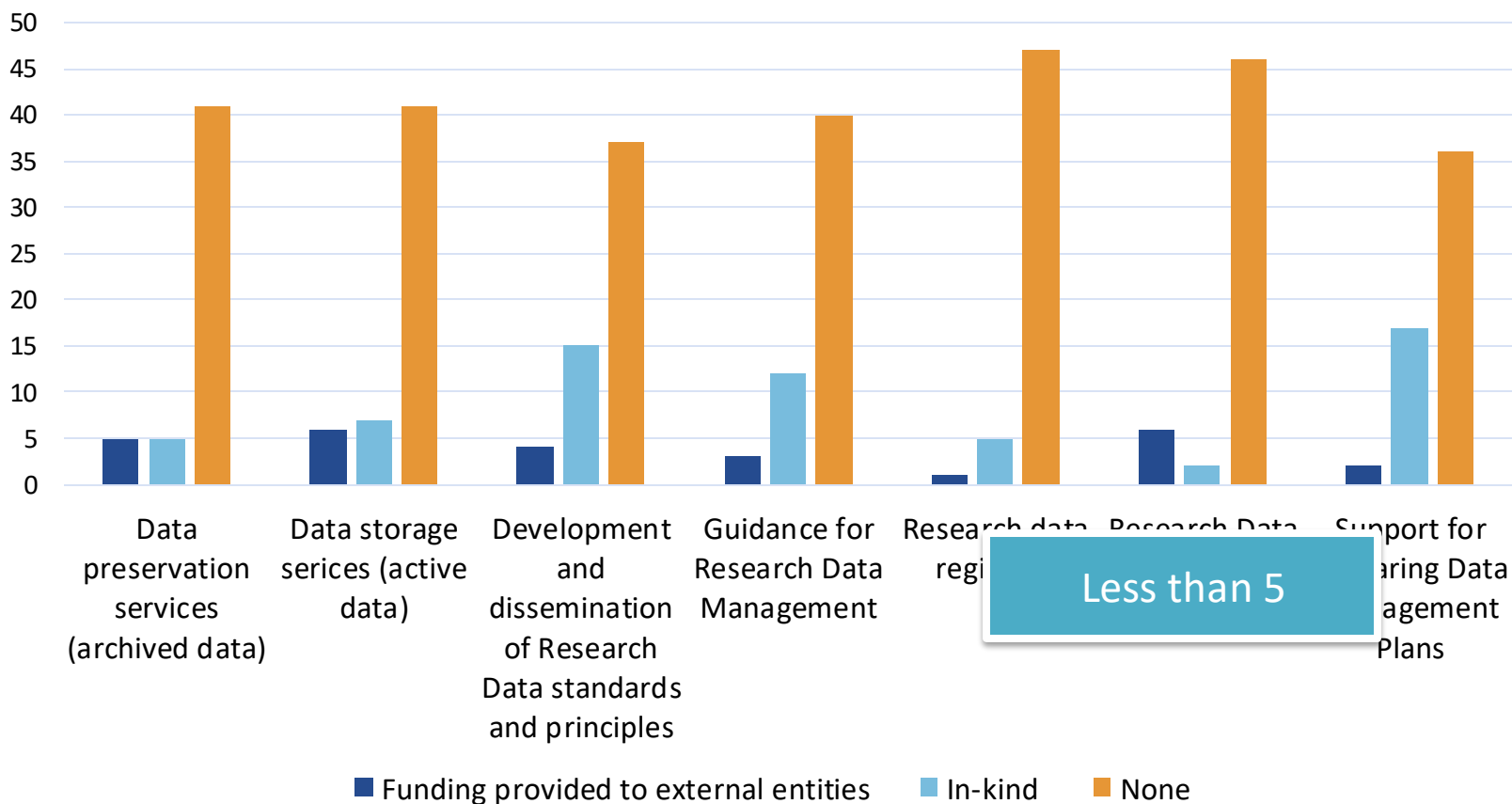
# Examples of OA services / infrastructure

- \* Dev and dissemination of OA standards and principles (e.g. [OpenAPC](#), [Open Citations](#), [ORCID](#))
- \* APC-free or subsidised Open Access platforms (e.g. [Wellcome Open Research](#)) \*
- \* APC-free / subsidised OA journals (e.g. [OLH](#), [SciPost](#))
- \* OA repositories (e.g. [EuropePMC](#), [OAPEN](#), [arXiv](#))
- \* OA services for articles (e.g. [SHERPA](#), [DOAJ](#)) \*
- \* Platforms and services for OA books and monographs (e.g. [Knowledge Unlatched](#), [OpenEdition](#))



# More support for OS infra: RD

Support provided to Research Data initiatives by all funders (in kind and financial)



# Examples of RD infrastructure

- \* Development and dissemination of Research Data standards and principles (e.g. FAIR Data)
- \* Data preservation services (archived data) \*
- \* Data storage services (active data) \*
- \* Guidance for Research Data Management (e.g. UKDS guidance)
- \* Research data registries (e.g. re3data)
- \* Research data repositories \*
- \* Support for preparing Data Management Plans

# Open in the evaluation process

## 7. Consider more OA in your evaluation process

## Plan S: Principle 10

“The Funders commit that when assessing research outputs during funding decisions they will value the intrinsic merit of the work and not consider the publication channel, its impact factor (or other journal metrics), or the publisher.”

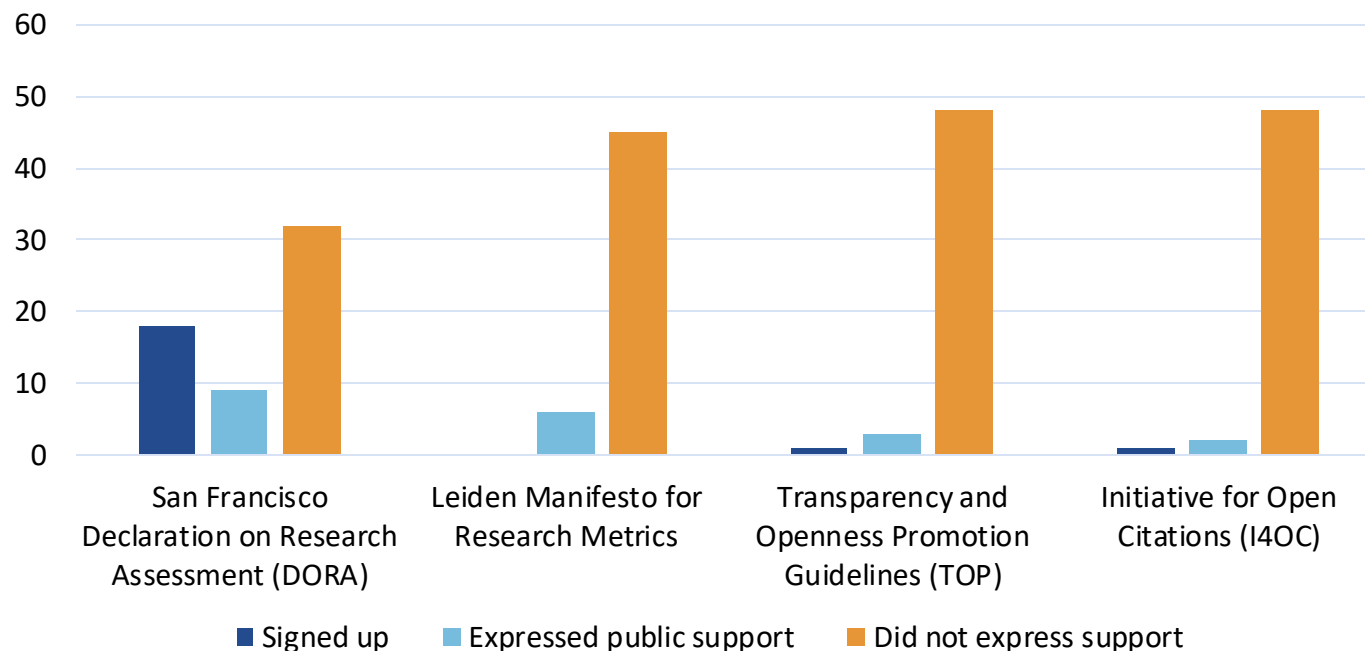
Supports DORA

>> Implementation deadline Jan 2021

# Responsible use of metrics

27 funders signed or expressed support for DORA

Funder support for the responsible use of research metrics



SPARC Europe, *Insights into European research funder Open policies and practices, 2019*,  
DOI: 10.5281/zenodo.3401278

# Evaluation criteria: Top scorers

- \* Quality of research uptake & dissemination strategy: 32
- \* Number of peer-reviewed articles: 29
- \* Prizes or honours received: 29
- \* Quality of plan for societal impact: 28
- \* Quality of project man./governance: 28
- \* Number of citations of publications: 26

# Evaluation criteria: Low scorers

- \* Number of peer reviews undertaken: 4
- \* Altmetrics: 5
- \* Quality of plans to promote equality and diversity: 13
- \* Quality of data management plan: 13
- \* Do not have a formal set of criteria: 14

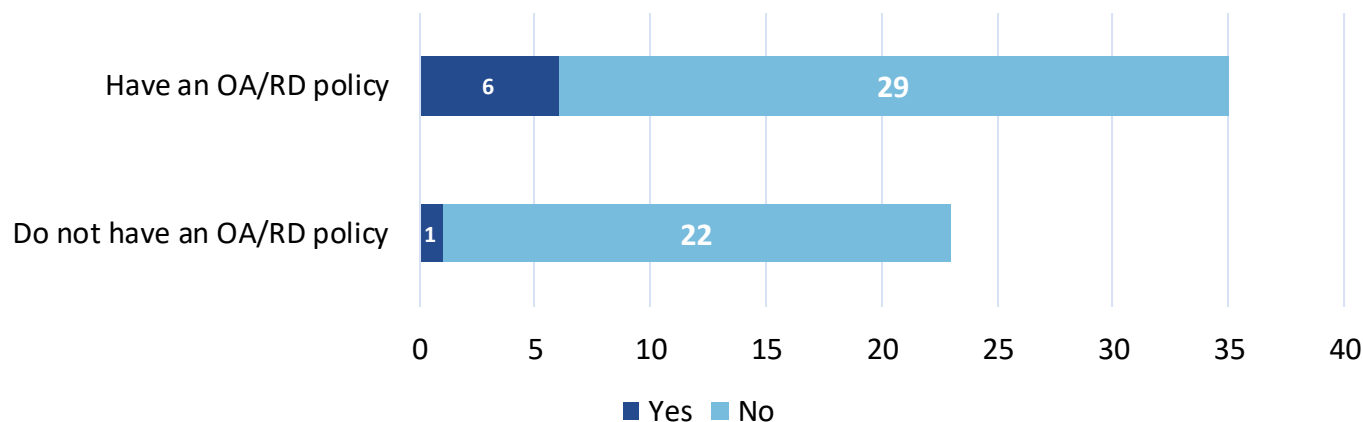
# Other funder evaluation criteria

- \* CV
- \* CV of the PI / Supervision
- \* Fundraising track record
- \* Collaboration & Stakeholder engagement
- \* Evidence of influencing policy and/or practice
- \* Public outreach /
- \* knowledge exchange
- \* 5 top publications presented related to the project
- \* Invited presentations
- \* Participation in reviews
- \* Preprints / grey lit
- \* Creative outputs
- \* Research plans
- \* Prototypes
- \* Patents
- \* Soft skills
- \* Gender in research
- \* Any IP
- \* Any kind submitted



# Use OS criteria in grant evaluation

## Use of Open Science criteria in grant evaluation



SPARC Europe, *Insights into European research funder Open policies and practices*, 2019,  
DOI: 10.5281/zenodo.3401278

# OS evaluation criteria: > Info from 3

1. Many OS-CAM implicitly utilized
2. Research integrity an aspect for panels
3. Science Foundation Ireland
  - # of pubs openly available
  - List 3 most important pubs, and are they OA
  - No + weight given to OA, reviewers guided to focus on availability (openness) of publication.
  - CV template requires researchers to highlight 3-5 "Key Achievements" which could include dev. & dissem. of datasets and / or software

# OS evaluation criteria: 3 respondents

## Science Foundation Ireland (continued)

- For certain programmes, applicants required to submit **DMPs** which should consider **FAIR**, **how** data will be **shared, stored and preserved** and any **ethical** and **legal** considerations.
- **New data provenance reviews** in its award management activities. Here, an expert panel can engage with the team on **procedures used for data capture, analysis, storage, curation and sharing.**

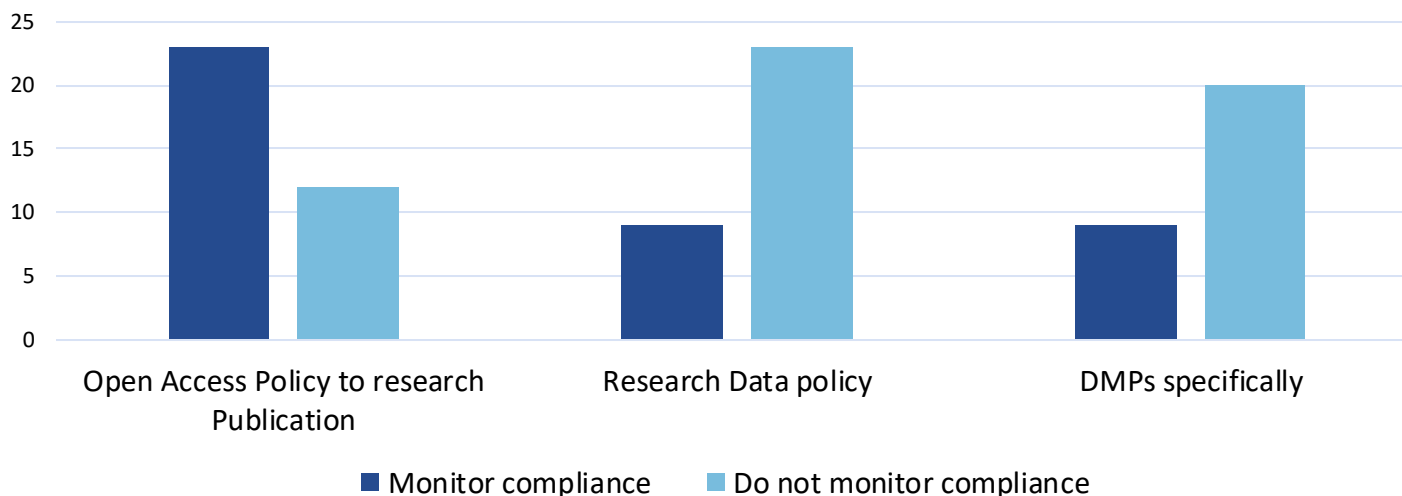
# On educating evaluators on OA/RD

- \* 9 provide guidance or active education
- \* 4 have plans to do

# Monitoring compliance

## 8. Monitor more closely for policy compliance and establish enforcement strategies

Number of funders monitoring Open Science policy compliance



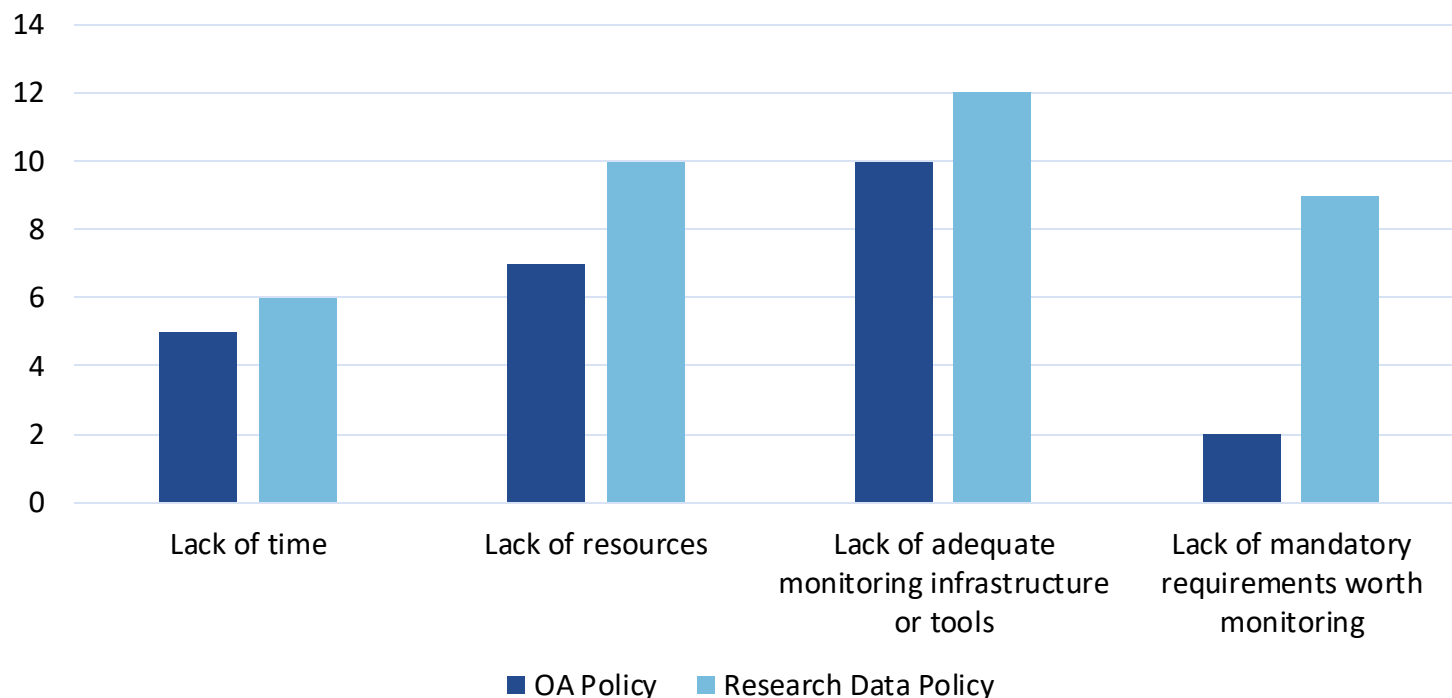
SPARC Europe, *Insights into European research funder Open policies and practices*, 2019,  
DOI: 10.5281/zenodo.3401278

# How do you monitor OS policy implementation?

- \* Through grant-level reporting by grant recipients 18 \*E
- \* Monitoring deposit in institutional repositories via a national/international aggregator (e.g. RCAAP, OpenAIRE) 9 \*N
- \* Through organisation-level reporting by institutions 8
- \* Through high-level studies of compliance 7 \*\*
- \* Monitoring using web-based search tools (e.g. [Web of Science](#), [1Science](#), [Dimensions.ai](#), [Wizdom.ai](#)) 7
- \* Through assessment of DMPs by int or ext reviewers 6 \*E
- \* Monitoring deposit in specific repositories (e.g. Europe PMC) 5
- \* Monitoring deposit in national repositories (e.g. [HAL](#)) 3

# Monitoring compliance: Why not

Factors preventing funders from monitoring their Open Science policies



SPARC Europe, *Insights into European research funder Open policies and practices, 2019*,  
DOI: 10.5281/zenodo.3401278

# Next steps

- \* Exploring opportunities with funders
- \* Further research
  - Comparison of data between [EUA OA report](#) and EC 2018 report: [Access to and preservation of scientific information in Europe](#)
  - Deeper dives into data



# THANK YOU, Any questions?

**SPARC\*  
Europe**  
Established on 3 Feb 2004

Our efforts have paid off.

 250 days, 20 months

After spending more than 250 days over the course of 20 months working to help shape key EU legislation, our recommendations for:

- \* the new European copyright reform,
- \* the Open Data and Public Sector Information Directive and
- \* Horizon Europe

were largely implemented

5.000 

Our most popular brief on Open Science policies in Europe has been downloaded more than 5000 times

 > € 1.000.000

We helped raise more than 1 million Euros for Open Science infrastructure in 2018

## Working to support you to make Open the default

-  Helping you more easily implement Open Research locally by **influencing policymakers to shape European legislation and policy across Europe** that safeguards and advances open access to research publications and data
-  Providing locally-adaptable tools that help inform on policy and legislative changes that will impact your work to support you as you adopt and apply new European legislation and/or policy such as Plan S
-  Creating interactive advocacy and policy-making tools to help you monitor and develop institutional policy
-  Producing briefings and guides, e.g. on copyright and licensing, to help you more easily advocate on Open Access to research and education
-  Stimulating engagement with and among researchers and teachers in Higher Education and other stakeholders around Open to accelerate cultural change within your institution
-  Promoting strategic investment in the services that comprise Open infrastructure to help sustain the Open Science infrastructure upon which you depend
-  Collaborating with experts and networks from across Europe and beyond to help keep you up-to-date with the latest developments on Open

 Collaborating with universities, their libraries and funders throughout the Open Science ecosystem, we are working to create a climate where Open thrives.

Our members span 23 European countries



In two years, we've given keynotes and presentations in 15 countries



Our 9 Board members hail from 6 countries





# **Roundtable on *Funders in Europe and Incentivizing Open Science***

**Kostas Glinos, Head of Open Science Unit  
European Commission**

Munin Conference on Scholarly Publishing, 28 November 2019

# The example of Health R&I

- *Close to €300 billion/year for Health R&I (worldwide)*
- *A large share of the research investment may be wasted: potentially as much as 85%, according to Chalmers & Glasziou 2009, Lancet; Macleod 2014, Lancet*

## **Unusable research reports**

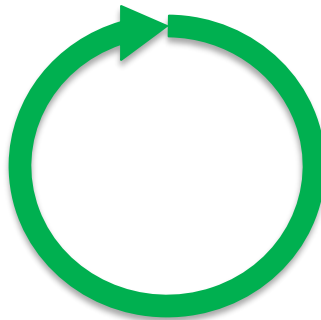
*- Methods and codes unavailable;  
Inadequate information on medical interventions in trials; etc.*

## **Scientific question not pertinent**

*- Not relevant to clinicians, carers and patients; Lack of awareness of already existing evidences; etc.*

## **Biased reporting of results**

*- Selective reporting; Data reported not made comparable with other studies; Conflicts of interest; Fraud; etc.*



## **Poor study design, conduct and analysis**

*- Low statistical power; Not replicated enough; Not enough collaborative efforts; Poor training and mentoring of researchers; etc.*

## **Results not fully accessible**

*- "Disappointing" results less likely to be promptly published (or at all); Trials not registered; etc.*

# European Commission role in R&I: policy maker and funder

- **Policy**

- Commission Recommendation 2018/790 on Access to and Preservation of Scientific Information

- Reports in 2017 (evaluation of research careers) and 2018 (OSPP recommendations)

- ERAC Open Science & Innovation Standing WG recommendations in 2018

- Dialogue with many stakeholders including associations and societies

- **Funder**

- Rules and procedures of framework programmes

- Funding infrastructures and policy support measures

« *The exclusive use of bibliometric parameters as proxies for excellence in assessment by most funding agencies and universities/research organisations does not facilitate Open Science.*

*Researchers' engagement in Open Science will increase through **encouragement and incentives from employers and funders through assessment.** »*

*[From various expert group reports and position papers:]*

*Evaluation processes should give extra credits to individuals, groups and projects, that practice Open Science, based on appropriate indicators*

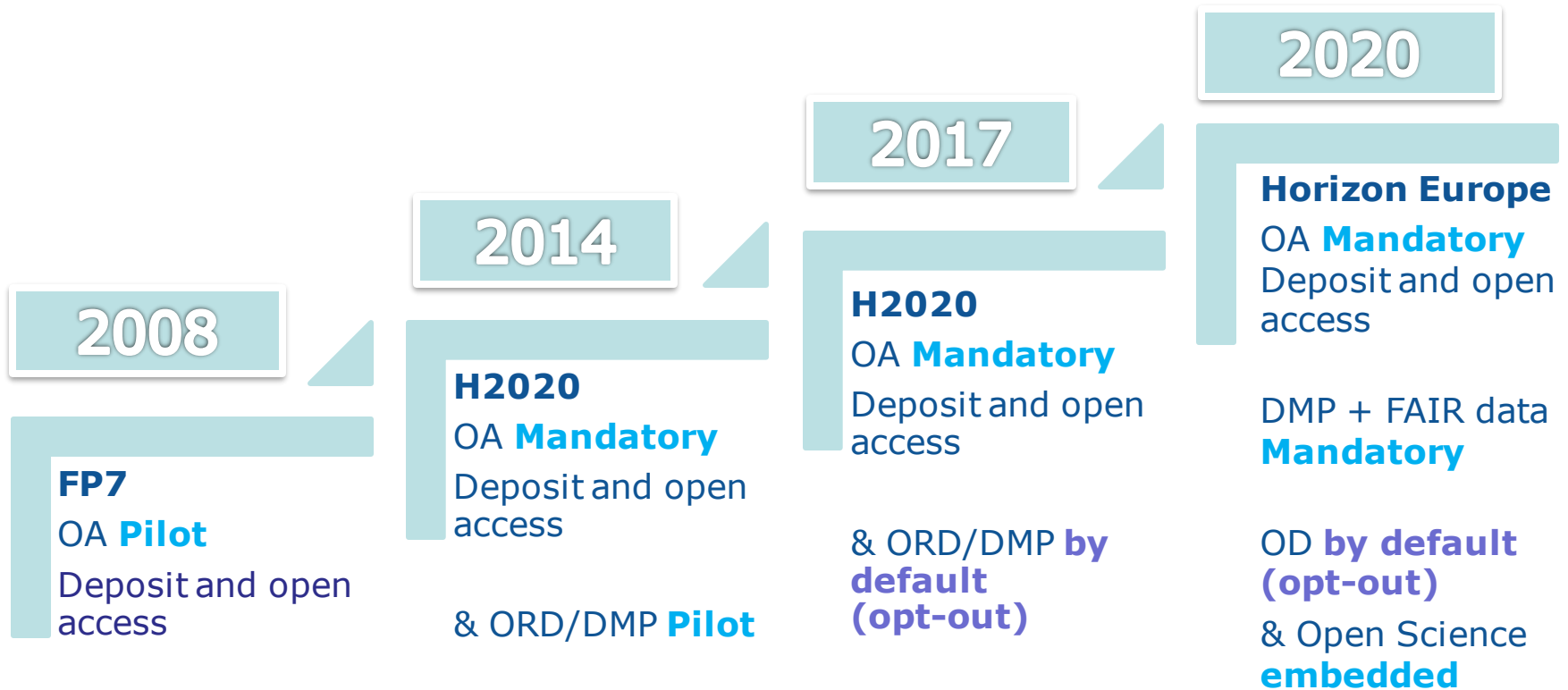
- All evaluation steps at all stages of careers are concerned: from PhD thesis examination, recruitment, promotions, project proposal assessment, funding allocation systems, to prizes and recognitions, etc.
- In the evaluation processes, more emphasis needs to be put on the quality of the outputs, including on reproducibility of results.

*The journal impact factors should not be used as a proxy for quality. Article-level and societal impact metrics should be developed and used.*

*There are already good practices that need to be collected and further exploited.*

*Incentives for life-long training on Open Science practices and research integrity are required.*

# Open Science in the FPs: stronger and stronger



# Monitoring and compliance with Open Science policies (1/2)

- **The policy of H2020 is reflected in the grant agreement (GA)**

Legal document that beneficiaries sign with the EC

Abiding by the requirements is a legal obligation of institutions receiving H2020 funding and having signed a GA

- **The EC monitors its OA policy through a combination of internal and external data**

CORDA data from internal reporting and OpenAIRE data and monitoring

Our policy can be considered successful, given an uptake of 93% (to peer-reviewed journal articles, which is our requirement)



# Monitoring and compliance with Open Science policies (2/2)

- **Project PO's check that requirements are met**

Non-compliance to legal requirements constitute breach of contract

Non-compliance is low and when there is a problem beneficiaries generally try to fix it

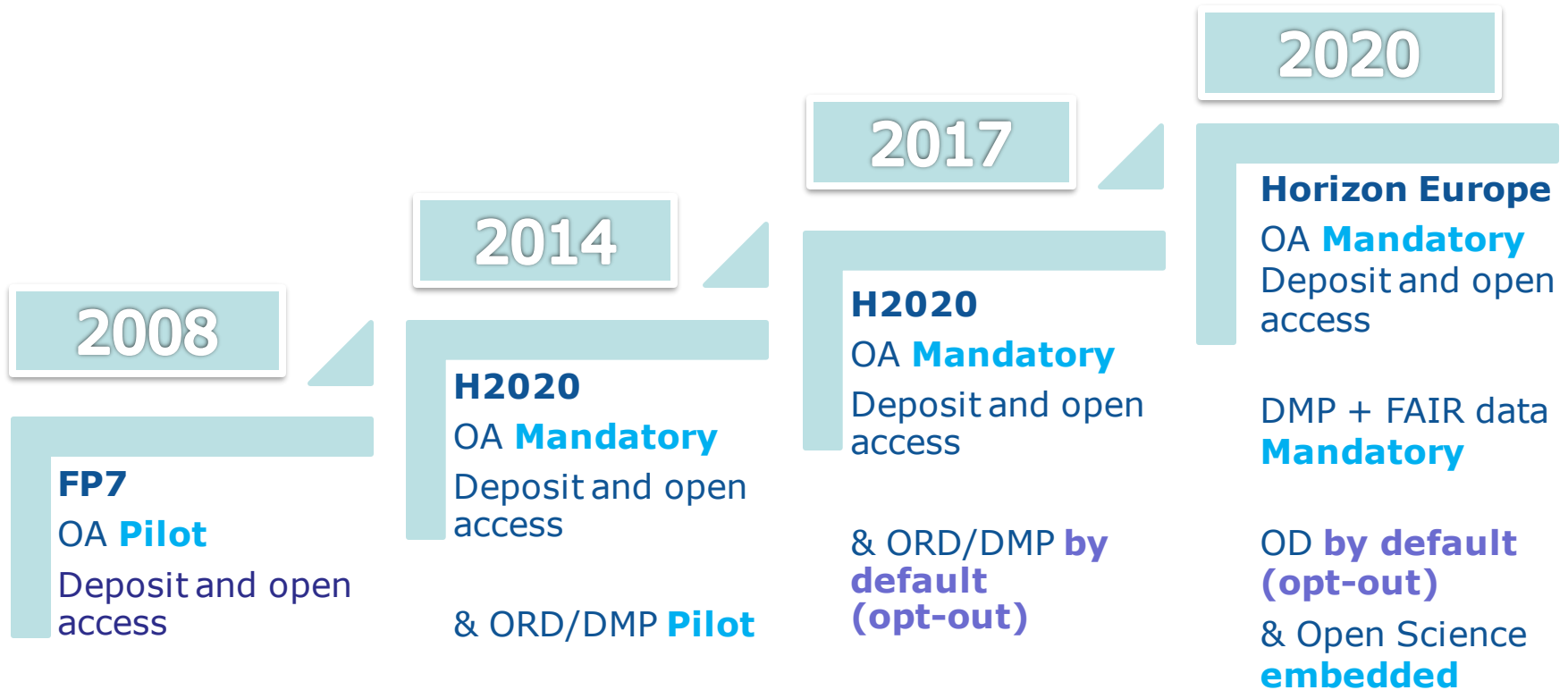
Consistent oversight by POs and constant flow of information essential, also in managing the resources spent on this activity

- **Follow-up work on monitoring and enforcement: commissioning a study**

The study will focus on uptake as well as compliance to legal requirements and advice on how to monitor in the future

We have thus far focused on the first as opposed to examining whether all legal requirements are met

# Open Science in the FPs: Horizon Europe



# Open Science in Grant Evaluation

- **Planning for the implementation of Horizon Europe under way; discussion with MS in spring 2020**
- **Ideas for including Open Science in proposal evaluation**
  - DMPs evaluated?
  - Co-creation and co-design with citizens mainstreamed?
  - Rewarding Open Science practices?
- **Briefing evaluators**

# Investment in Infrastructure

- **Commission has been supporting infrastructure for scholarly communication in multiple ways (and will continue)**

Interoperability of repositories through projects, for example OpenAIRE since 2010

Development of a central repository, zenodo, mainly through OpenAIRE

Many investments in data infrastructure, including through EOSC

Scale up of institutional infrastructures in Social Sciences and Humanities, for example through the OPERAS, HIRMEOS and TRIPLE projects

Selective funding of infrastructures of significance for its policy, such as PubMedEurope and OAPEN (through specific grants by the ERC)

Procuring a publishing platform as a free service to authors with papers stemming from our funding, meeting our policy requirements

# Engagement with Universities and RPOs

- **The current (official) framework:**

**Commission recommendation (EU) 2018/790** encourages OS policies (and national action plans) for Member States, but also academic institutions and institutions managing public research funding

**Article 32 of the Horizon 2020 Model Grant Agreement** spells out the "*Obligation to take measures to implement the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers*"

**Annotated Grant Agreement** refers to the "*Human Resources Strategy for Researchers*"

**Policy reports** issued by the OSPP

- **Potential future actions:**

Ideas on how to support the modernization of R&E institutions welcome!



**Thank you!**

<http://ec.europa.eu/research/openscience/index.cfm?pg=home>