



How FAIR does national European research data policy need to be?

Open Science strategic approaches and the importance of open research data

6 October 2020, Webinar



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A range of national policies >14



OS policy framework and alignment

- * International
- * National
- * Research funder
- * Institution
- * Other stakeholders

SPARC Europe study into funder policies, rewards and incentives

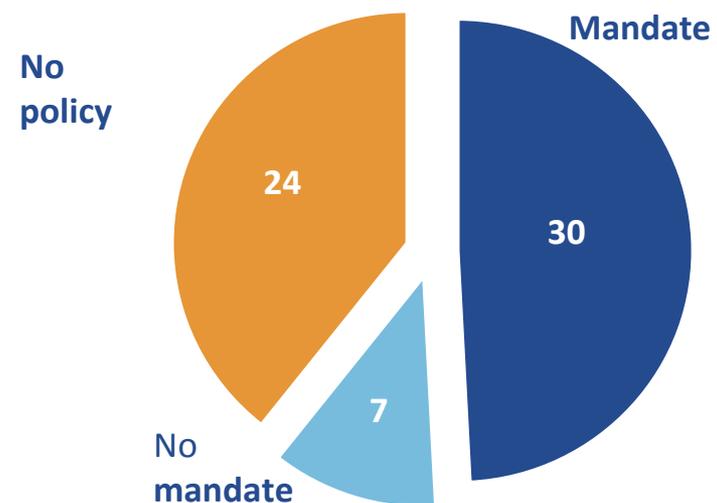
- * Science Europe, EFC, ALLEA
- * Report - 30 Sept 2019
- * <https://zenodo.org/record/3401278>

- * A snapshot in time



OA policy development status

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

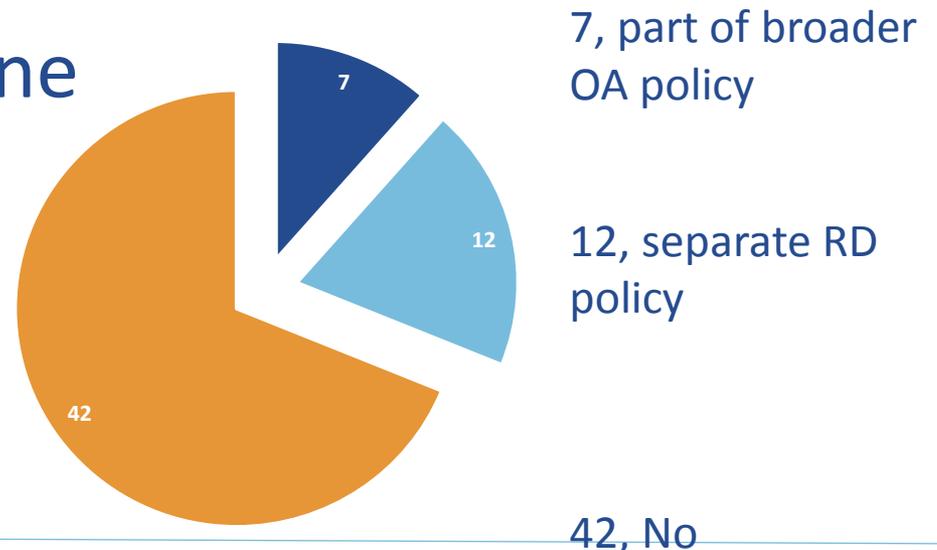


OS policy development status

- **19 with** an OS policy:
12 a separate RD policy

- **42 no research data policy**

- **13 developing one**



An Analysis of Open Science Policies in Europe, v6

- * National updates
- * An overview of Covid-19 policies
- * EOSC policy activity

[https://doi.org/
10.5281/
zenodo.4005612](https://doi.org/10.5281/zenodo.4005612)



European national policy analysis

- * EC Project: <https://fairsfair.eu>
 - Fostering FAIR Data Practices in Europe
- * 1 Mar 2019
- * 36 months
- * 22 partners
- * WP3: FAIR Data Policy and Practice
 - National policy landscape analysis



FAIRSFair
Fostering Fair Data Practices in Europe



FAIRSFair

Fostering Fair Data Practices in Europe

SPARC*
Europe

policy deliverables

- * D3.1 FAIR Policy landscape analysis

<https://zenodo.org/record/3558173>

Over 20 RD policy characteristics analysed

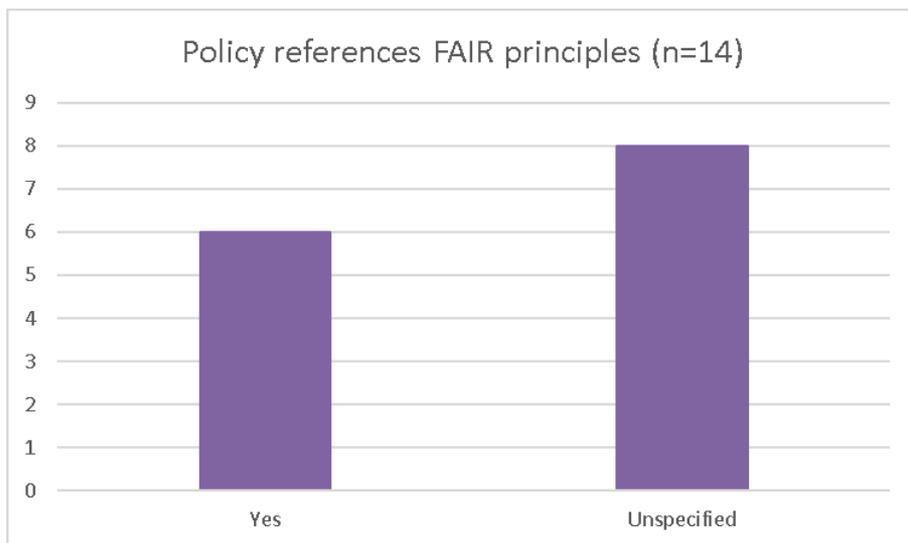
- * D3.3 Policy Enhancement Recommendations

<https://zenodo.org/record/3686901>



How FAIR does national OS policy need to be?

References to FAIR



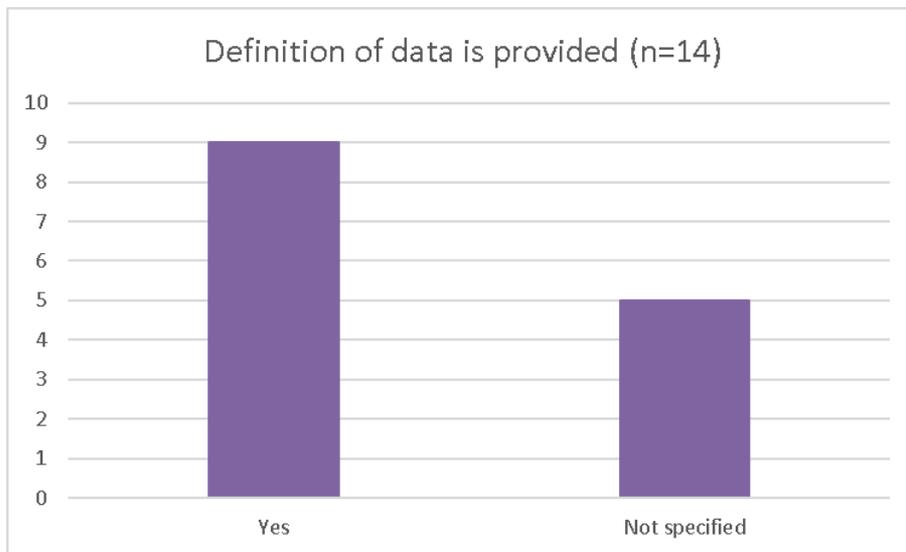
- * refer to FAIR specifically to better promote a culture of FAIR practice
- * E.g. Netherlands, Finland, France, Ireland, Spain, UK

FAIRSFAIR Rec on FAIR

Note: emphasis added

2. Cooperate with relevant initiatives to support funding bodies to characterise and, where needed, enhance policies to **align with FAIR principles** - either explicitly or implicitly.

The definition of data



- * What outputs are covered by the term?
- * What data specifically do you expect researchers to make available?

The definition of data

* France:

“Research data: Factual records (figures, texts, images, sounds, videos, etc.) used as primary sources for research and which are generally accepted by the scientific community as being necessary to validate research results.”

French National Plan for Open Science, 2018,
<https://www.ouvrirlascience.fr/national-plan-for-open-science-4th-july-2018/>

FAIRSFAIR Rec on definitions

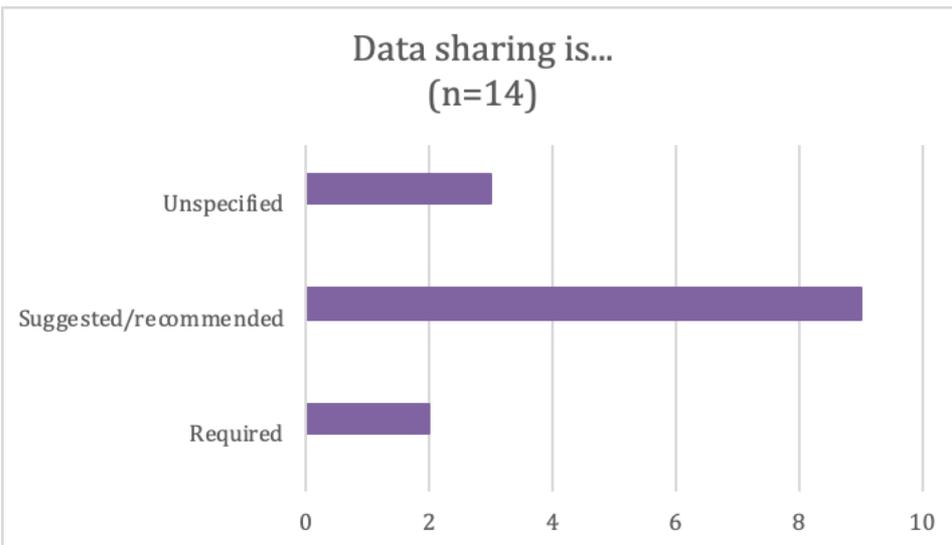
Note: emphasis added

6. Working with research communities to **define data outputs**, policymakers should adopt **standard descriptions** to ensure that definitions **provide clarity on the range of outputs** that should be considered and what might be considered “FAIR enough”

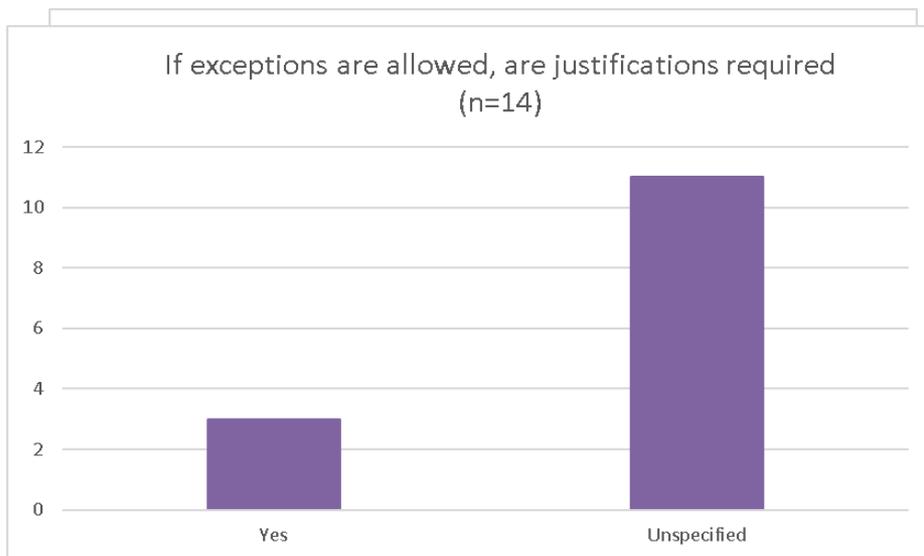
A mandate to share data

* Majority recommend rather than require

* Those who require it are Norway and Slovenia, with F plan to introduce a mandate



Exceptions to data provision



- * As open as possible but as closed as necessary ...
- * national security, or where there are issues relating to confidentiality, privacy, intellectual property rights, and trade secrets.

Exceptions to data provision

Note: emphasis added

- * The UK's *Concordat on Open Research Data* includes an extensive section on exceptions to data sharing

*“constraints on openness **must not be applied on a blanket basis** but should **be justified** and justifiable case by case. Research organisations or individual researchers withholding data must therefore consider carefully the grounds on which they are acting and **be prepared to justify their actions.**”*

UK: *Concordat on Open Research Data*, p. 9, 10

Data sharing and exceptions to data provision

Note: emphasis added

- * Slovenia: data sharing exceptions succinct, and state that if data cannot be made available, its **associated metadata** should be made available **making clear what data are available and where.**

National Strategy of Open Access to Scientific Publications and Research Data in Slovenia 2015-2020, 2015, p. 6

Exceptions to data provision

Note: emphasis added

- * Norway:
Closed access can be temporary and that controlled access options should be considered where open access is not feasible.

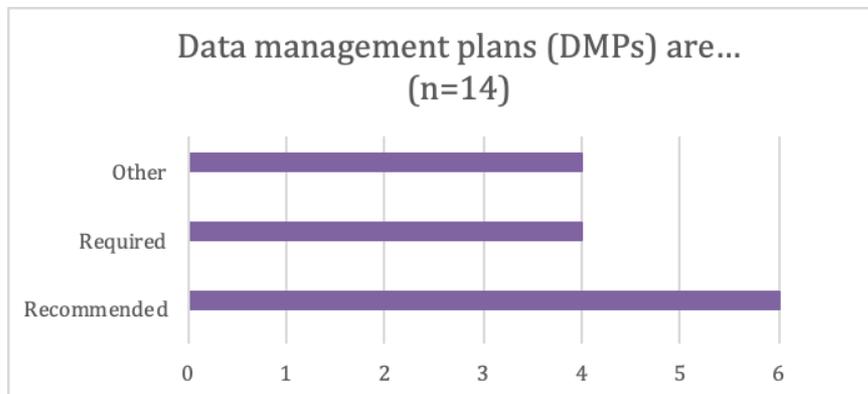
National Strategy on Access to and Sharing of Research Data, p. 6

FAIRSFAR Rec on Exceptions

Note: emphasis added

- 7. Standardised** exceptions for not sharing data should be developed and promoted in associated policy guidance
8. Standard exceptions should be **added to metadata** schemas used by repositories for consistency.

Data Management Plans (DMPs)



* 4 require them:
F, SLO, IRL, NO

* Pre or post award, or
monitor
throughout (0)

FAIRSFAR Rec on DMPs

Note: emphasis added

14. Require **updating of DMPs over the research lifecycle** leading to comprehensive, high-quality end stage DMPs that are included in end-stage reporting.

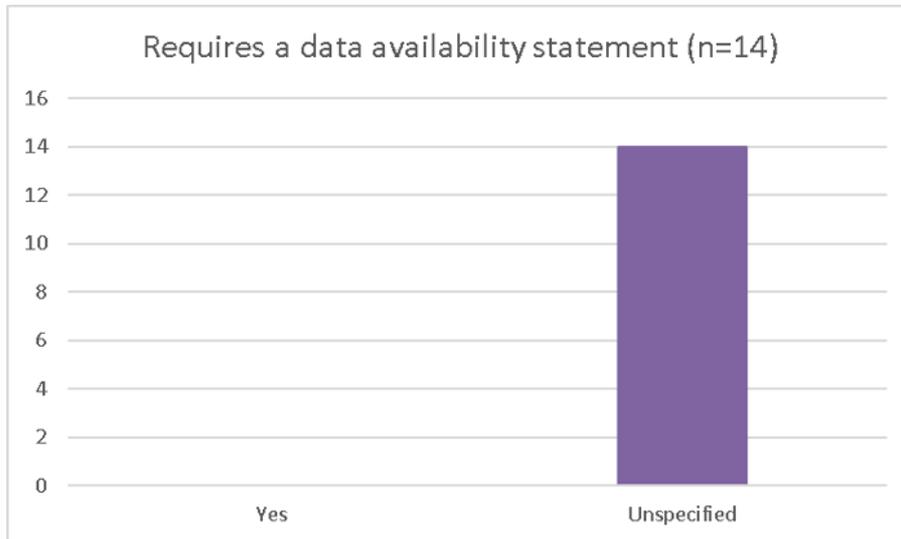
15. Policies and related guidance should emphasise that data management planning and sharing data **supports research integrity goals, enhances data quality and contributes to reproducibility and transparency.**

Stimulating data re-use

Research data re-use
saves time,
increases potential for
collaboration,
enhances the **return on
investment** for research
activities,
increases the **impact** of
research funding,
and **accelerates** the pace
of **discovery**

* Re-use stimulated by
e.g. NL, NO, SLO, SK
and UK

Data availability statement / ACCESS



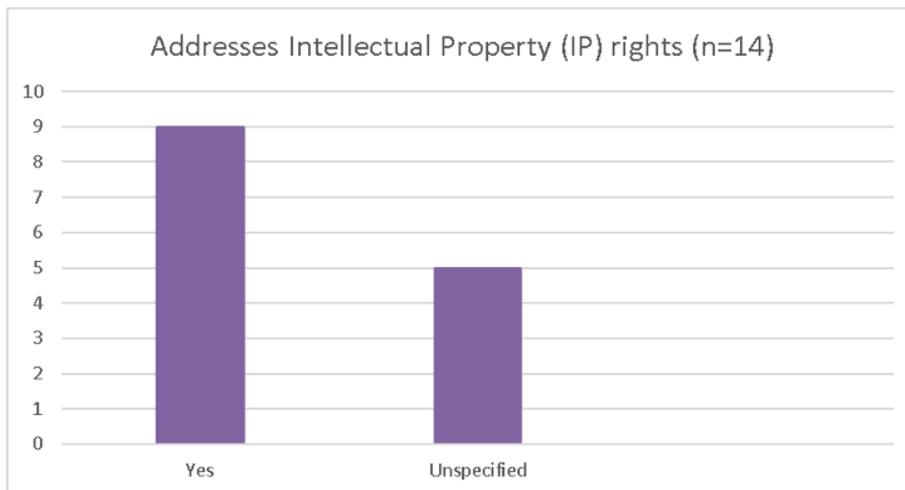
- * where and under what conditions data can be accessed
- * make link between publication and underlying data
- * part of good research practice

FAIRSF AIR Rec on Data Availability Statements

Note: emphasis added

12. Working collaboratively, define and require **standardised** Data Accessibility Statements

Addresses Intellectual Property: Reuse



- * Mainly referred to under conditions for not making data available
- * Open licensing by 5
- * Challenges
 - More research / guidelines needed into ownership
 - Business research communities/ knowledge transfer

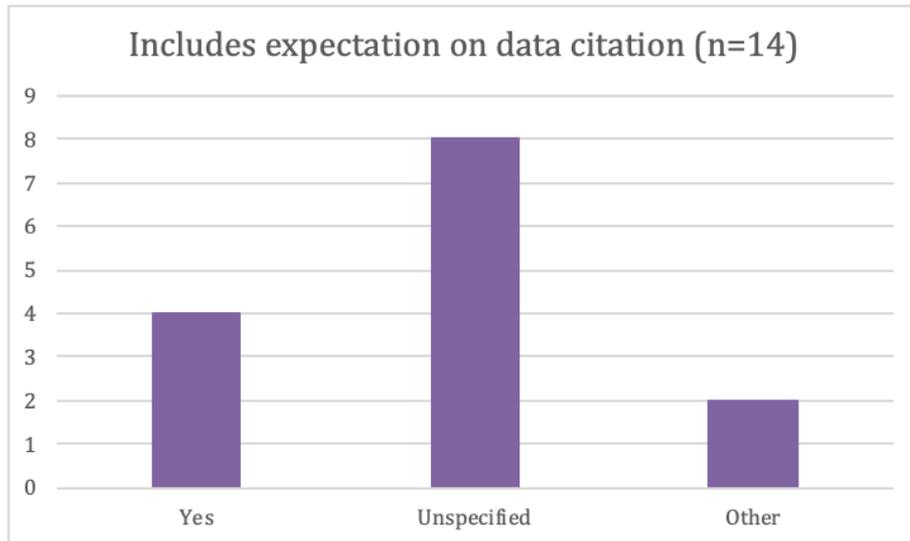
FAIRSFAR Rec on IP

Note: emphasis added

9. Working with relevant stakeholders, support **adoption of rights and licensing documentation schemas** for different types of research outputs as they are defined

11. Provide **legal guidance** on choosing appropriate licenses during active stage of research and for assessing the compatibility of different license types when reusing multiple data outputs

Rewarding sharing research data



- * Progress the **recognition of data** and other research outputs including software as **legitimate research outputs in their own right**
- * **Recognise authors in a standardised way**
- * E.g. CH, IRL, NO, UK

FAIRSF AIR Rec on Data Citation

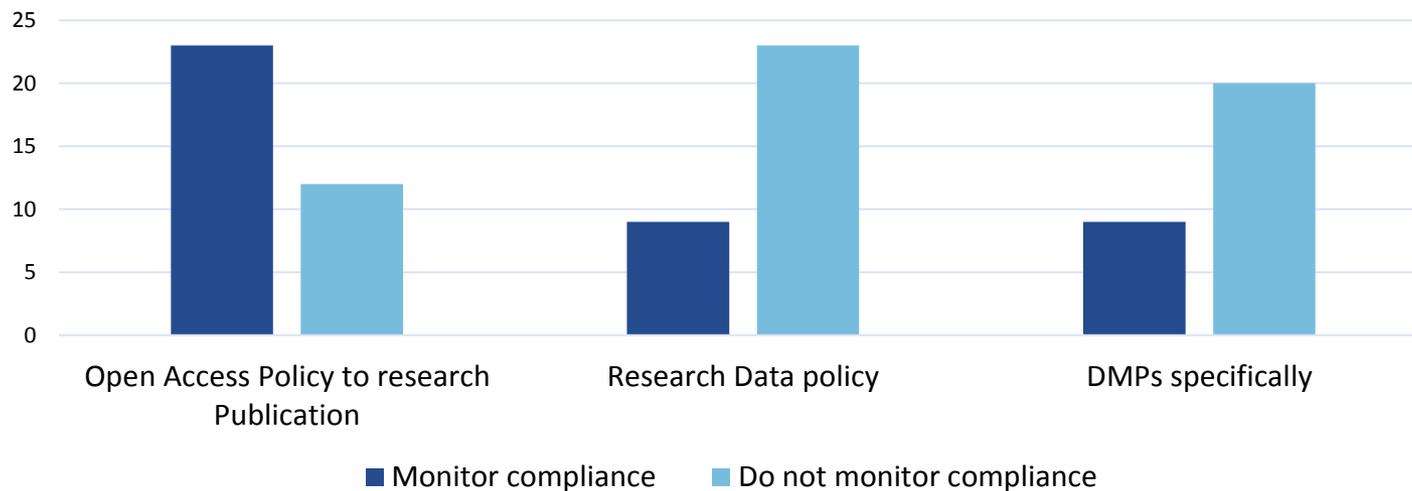
*Funding bodies and publishers could **strengthen their requirements in relation to data citation** and provide clearer guidance on how to do this in a standardised way*

20. Provide guidance on how to cite a broader range of research outputs including data and software...

And above all include data in research evaluation systems

Monitoring policy compliance

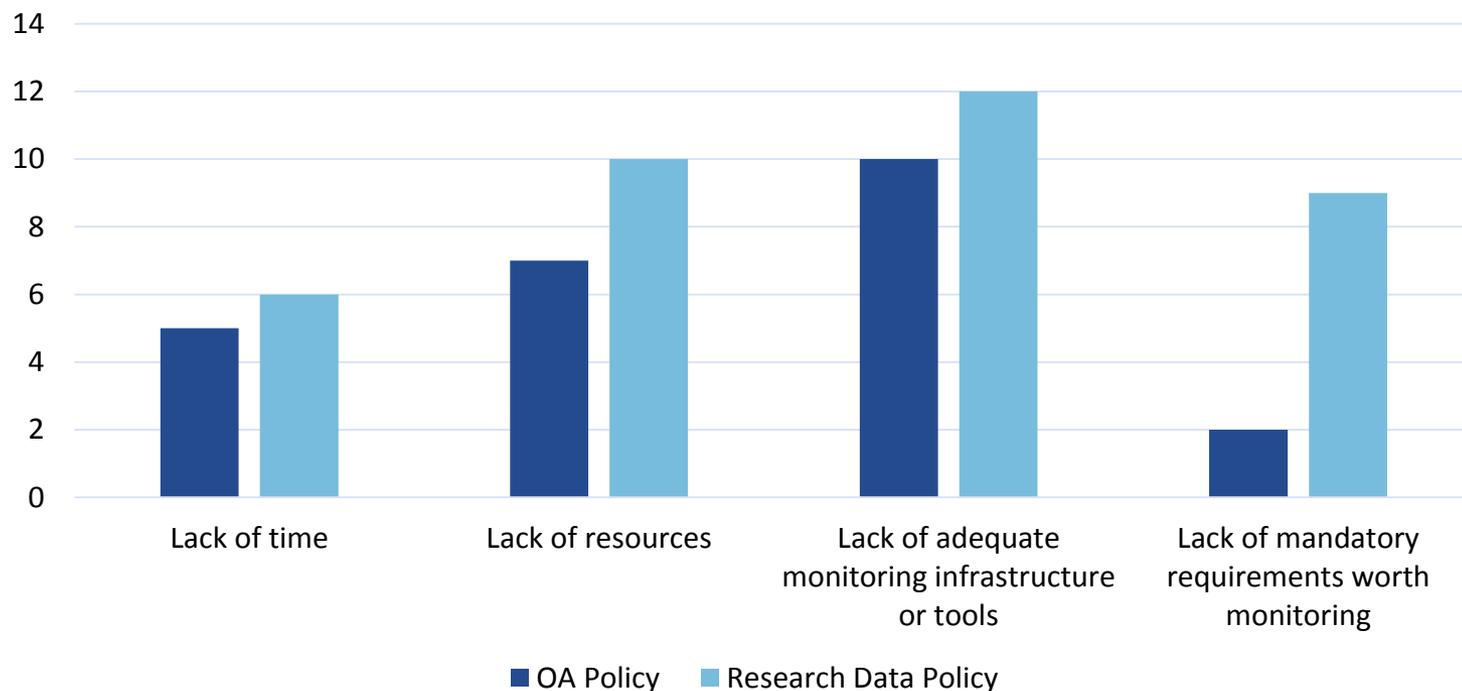
Number of funders monitoring Open Science policy compliance



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

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

FAIRSFAIR Rec on compliance monitoring

Note: emphasis added

22. Support stakeholders to consider compliance monitoring across the FAIR ecosystem using identifiers and knowledge graphs. An emphasis should be placed on **rewarding good practice** but, where necessary, the introduction of **penalties for non-compliance** should be considered

How FAIR does OS national policy need to be?

The more you consider what it means to be FAIR, and the more you specify that in your requirements or recommendations, the more FAIR your country's research data

Key references

- ✱ An Analysis of Open Science Policies in Europe, v6
<https://doi.org/10.5281/zenodo.4005612>
- ✱ D3.1 FAIR Policy landscape analysis
<https://zenodo.org/record/3558173>
- ✱ D3.3 Policy Enhancement Recommendations
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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

-  **1** 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
-  **2** 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
-  **3** Creating interactive advocacy and policy-making tools to help you monitor and develop institutional policy
-  **4** Producing briefings and guides, e.g. on copyright and licensing, to help you more easily advocate on Open Access to research and education
-  **5** Stimulating engagement with and among researchers and teachers in Higher Education and other stakeholders around Open to accelerate cultural change within your institution
-  **6** Promoting strategic investment in the services that comprise Open infrastructure to help sustain the Open Science infrastructure upon which you depend
-  **7** 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**

