From principles to practices: Open Science at Europe's universities

2020-2021 EUA Open Science Survey results

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EUA Open Science Survey evolution

2014

Open Access

Research Publications

106 responses, 30 countries

2015-2016

Open Access

Research Publications and Data

169 responses, 33 countries

2016-2017

Open Access
Research Publications and Data
Research Data Management
338 responses, 39 countries

2017-2018

Open Access
Research Publications and Data
Research Data Management
Research Assessment
321 responses, 36 countries

2019

Research Assessment in the transition to Open Science

260 responses, 32 countries

2020-2021

From principles to practices: Open Science in Europe's Universities

272 responses, 36 countries

TODAY

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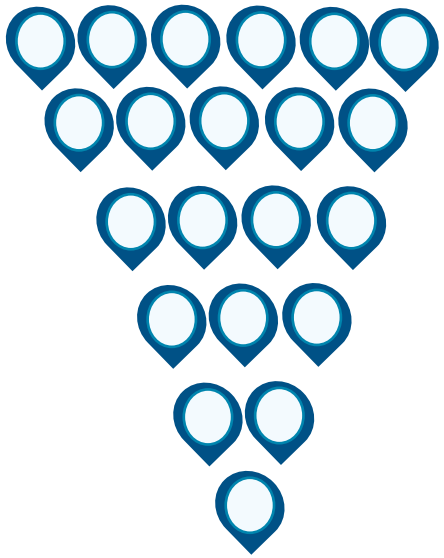
Outline

1. Open Science Survey participation rates
2. Objectives of the survey
3. Sample
4. Strategic importance and implementation of Open Science at institutional level
5. Open Access to research publications
6. Research data
7. Emerging areas of Open Science
8. Open Science in Research Assessment
9. Conclusions
10. Recommendations

Survey participation

Number of individual universities

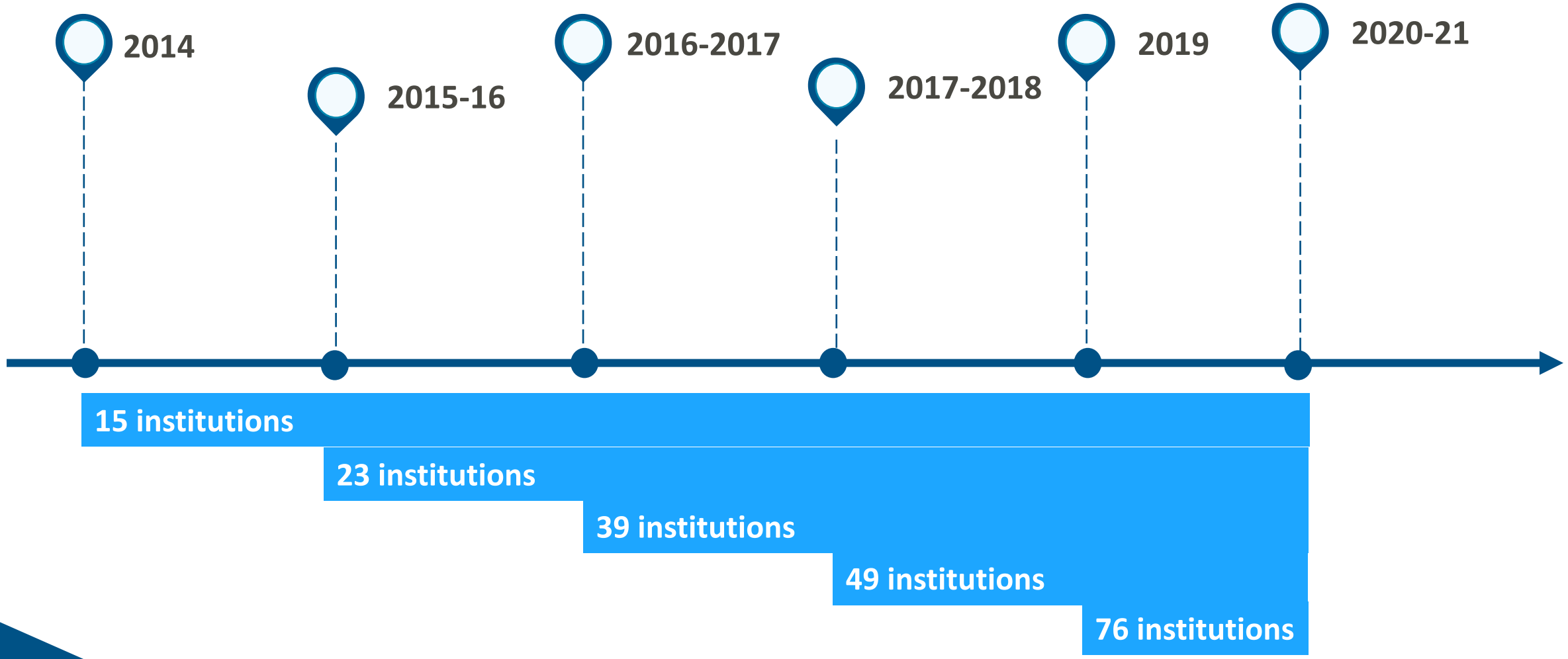


- 6 waves: 15 institutions
- 5 waves: 26 institutions
- 4 waves: 69 institutions
- 3 waves: 94 institutions
- 2 waves: 160 institutions
- 1 wave: 372 institutions

Total coverage of 736 individual universities between 2014-2021 (39 countries)

Participation continuity

The same institution participating multiple times



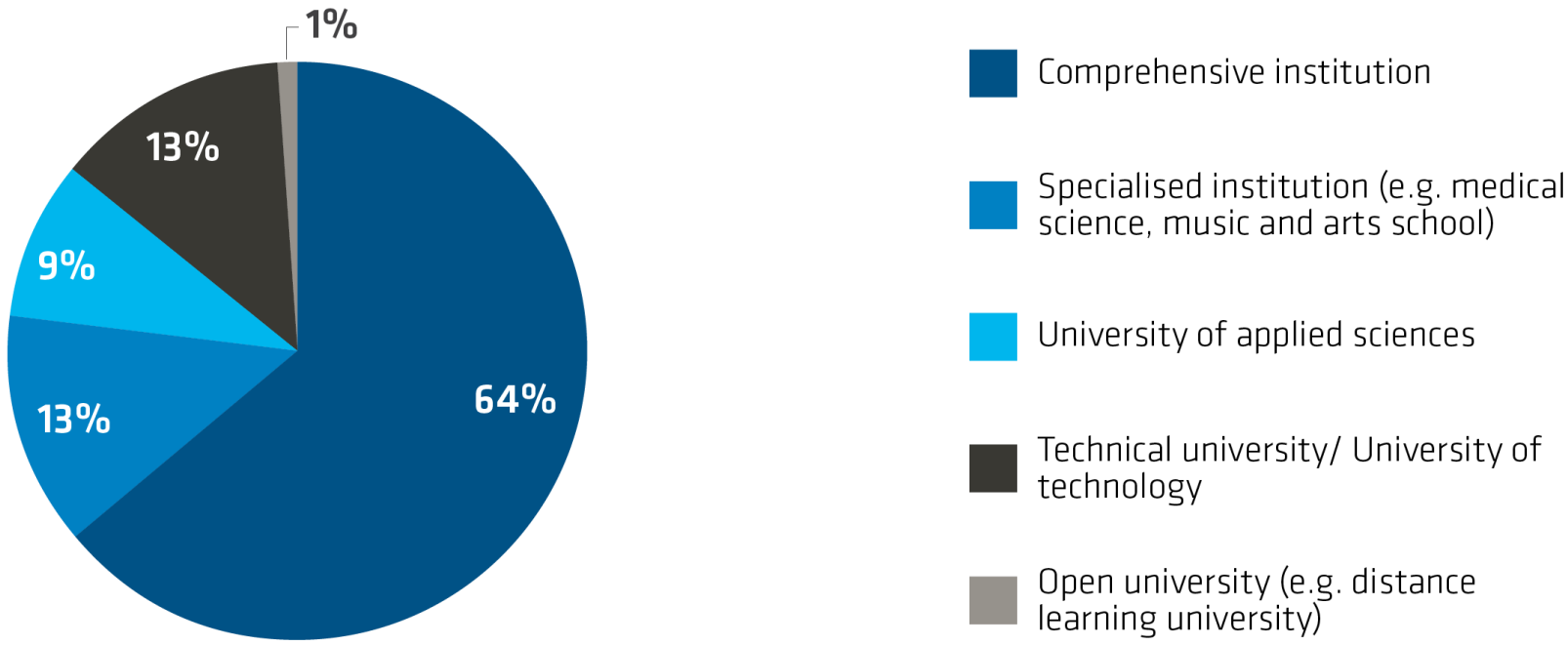
Gaps between principles and practices?

Strategic importance and implementation of more established (e.g. Open Access) and emerging (e.g. citizen science, open education) areas of Open Science

- Investigate whether there is a gap between the strategic importance given to Open Science and its implementation on the ground.
- Identify any areas of Open Science with a bigger gap.
- Improve understanding of the opportunities, challenges and hurdles for institutions.

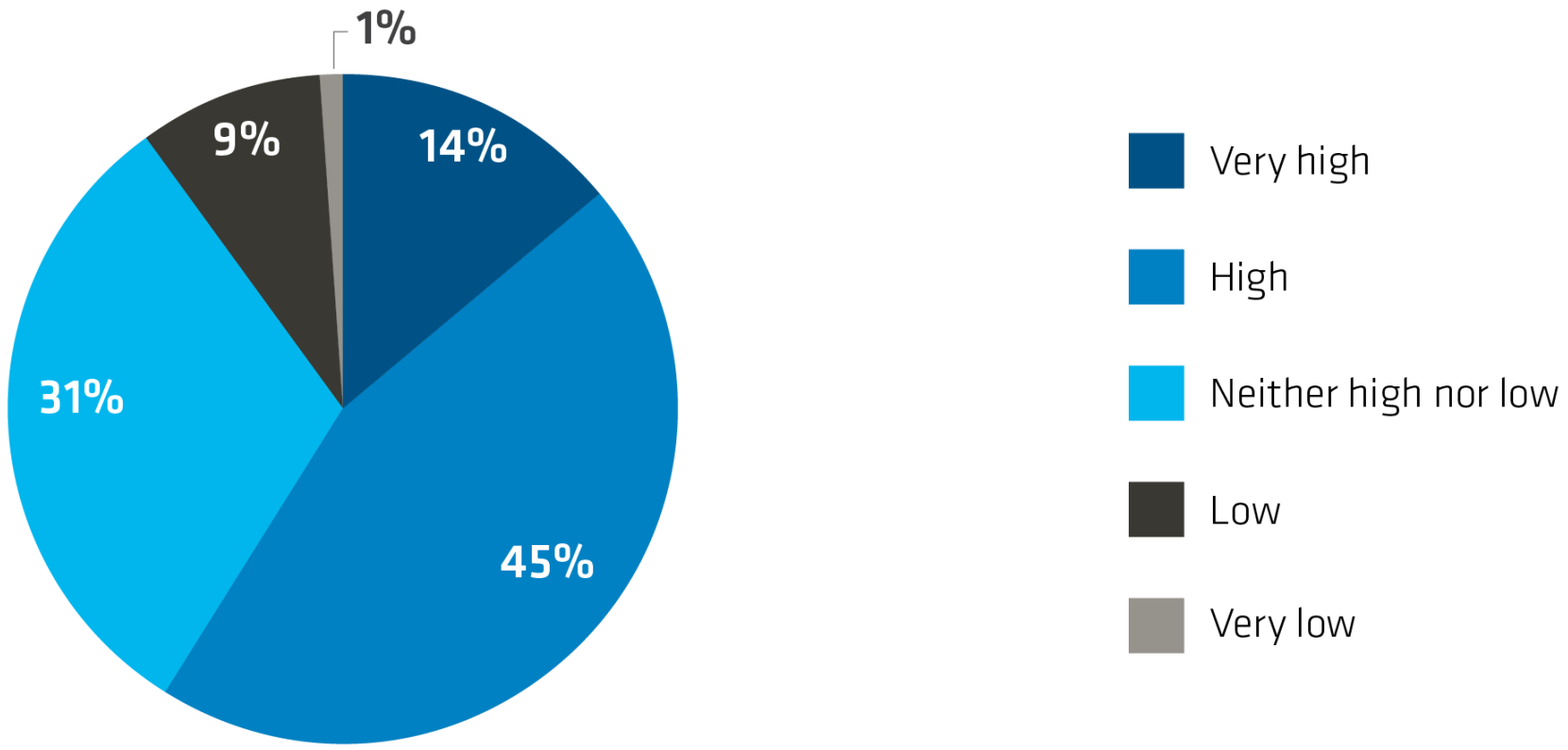
Sample characteristics

- Data collected between late October 2020 – mid-January 2021
- **272 valid responses from 36 European countries**



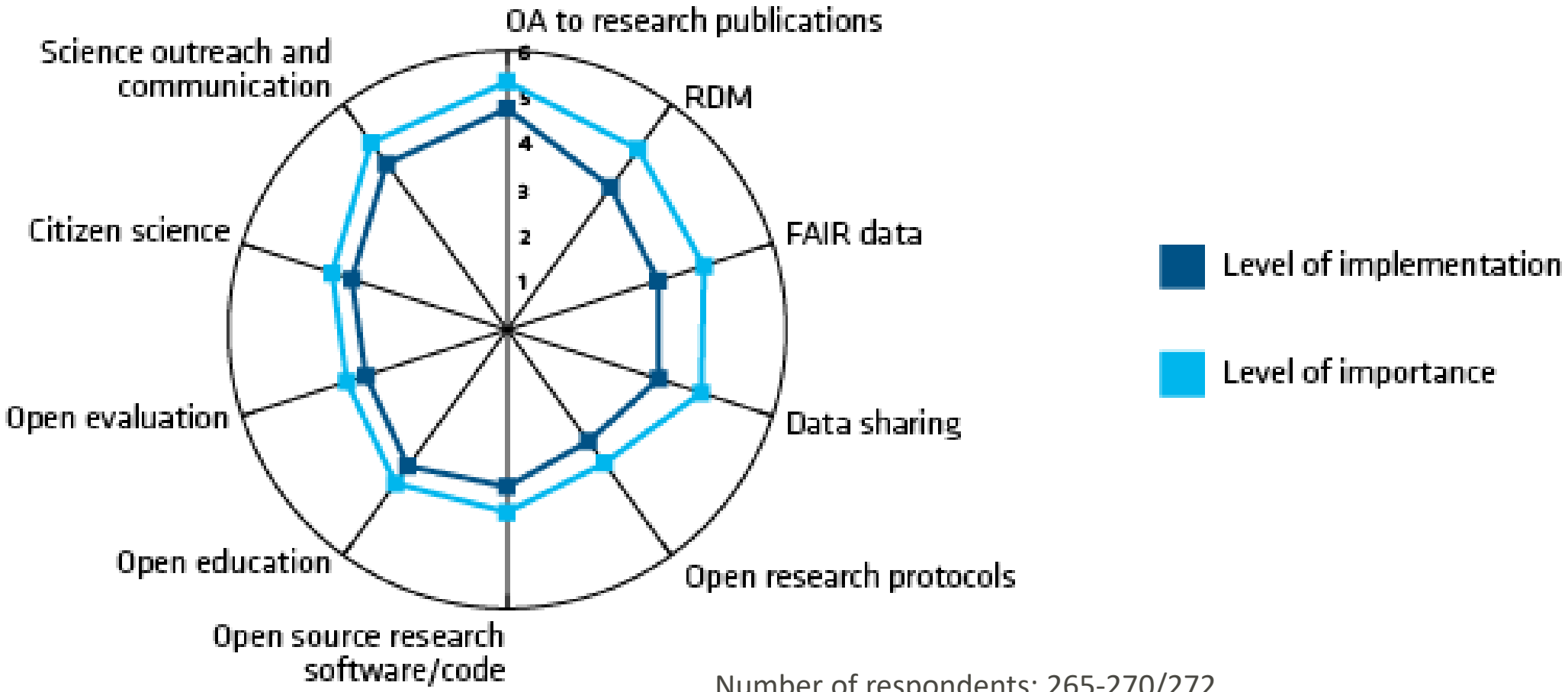
Number of respondents: 270/272

Importance of Open Science in terms of the institution's strategic priority areas



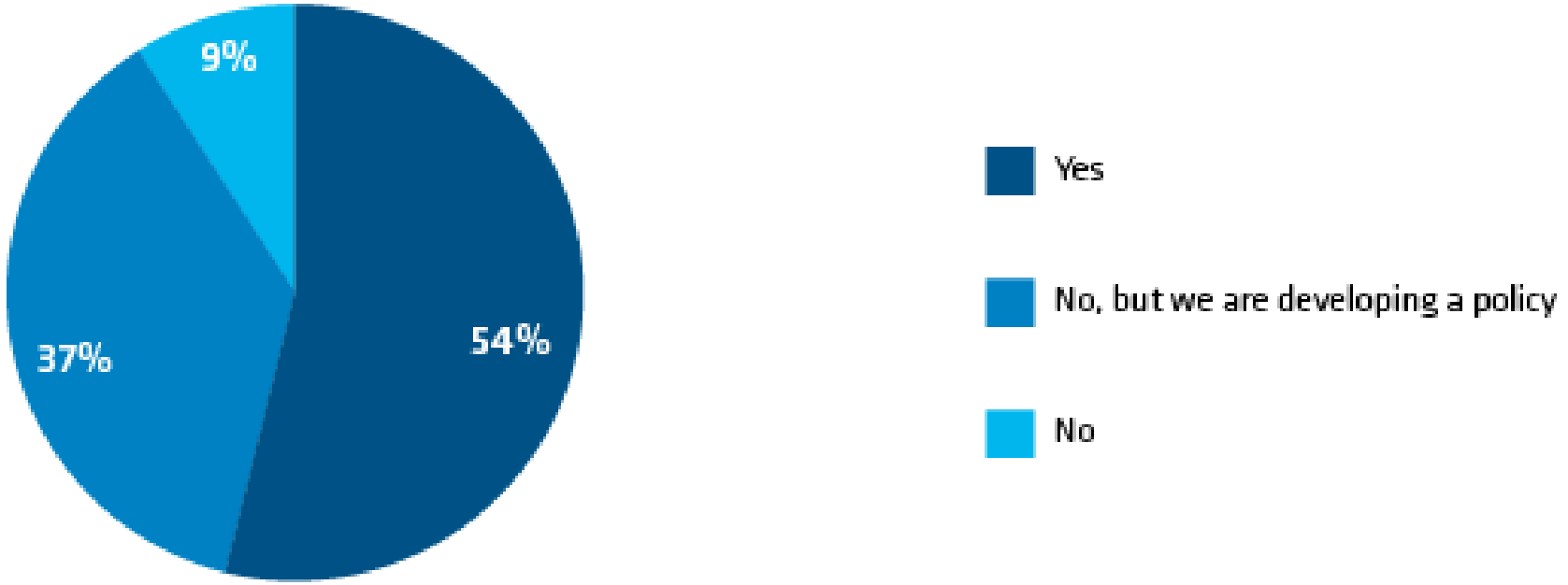
Number of respondents: 272/272

Level of importance and implementation of OS areas



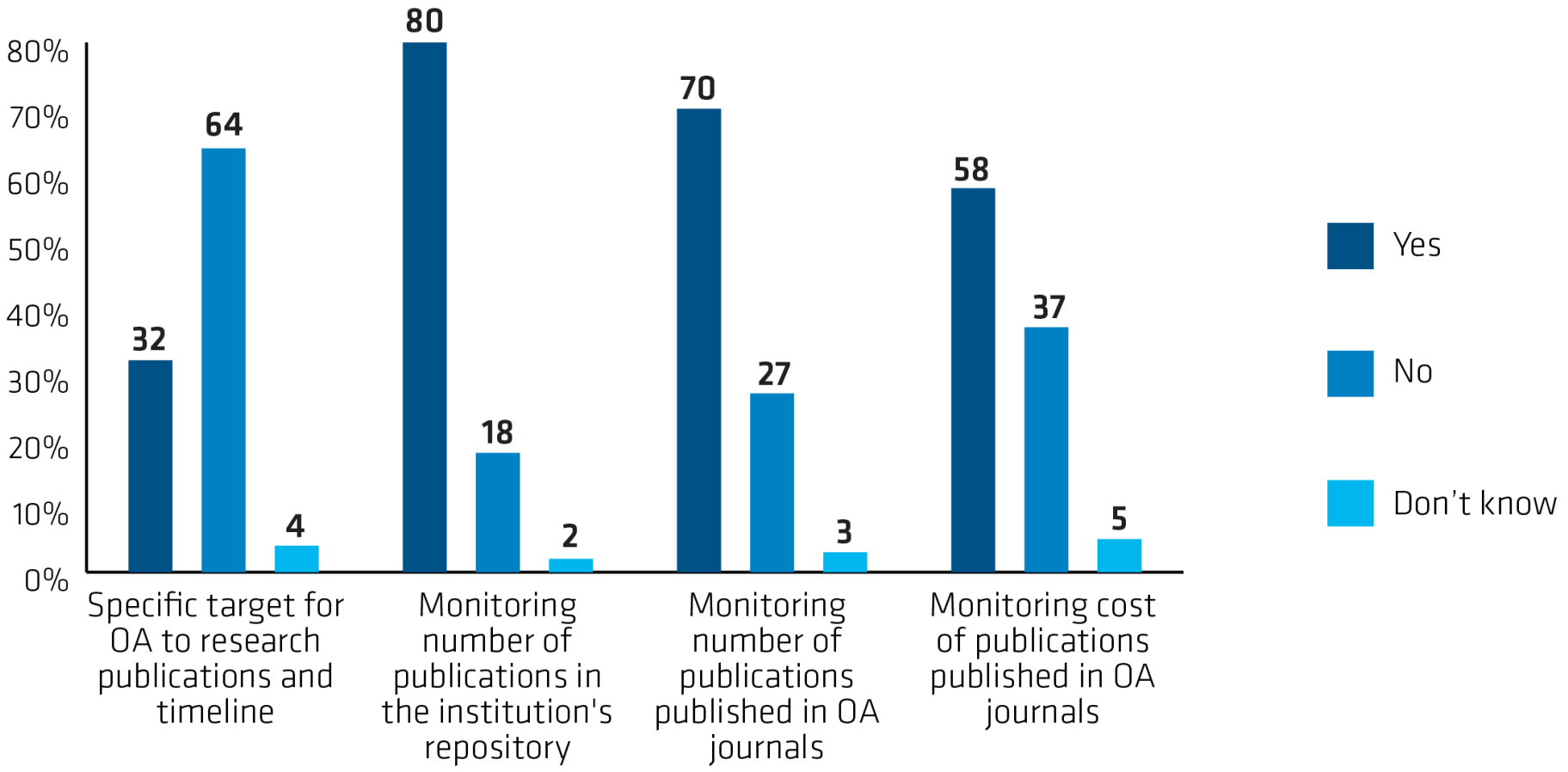
Number of respondents: 265-270/272
Note: scores represent mean values. Higher values indicate a higher level of importance or implementation

Existence of an institutional Open Science policy



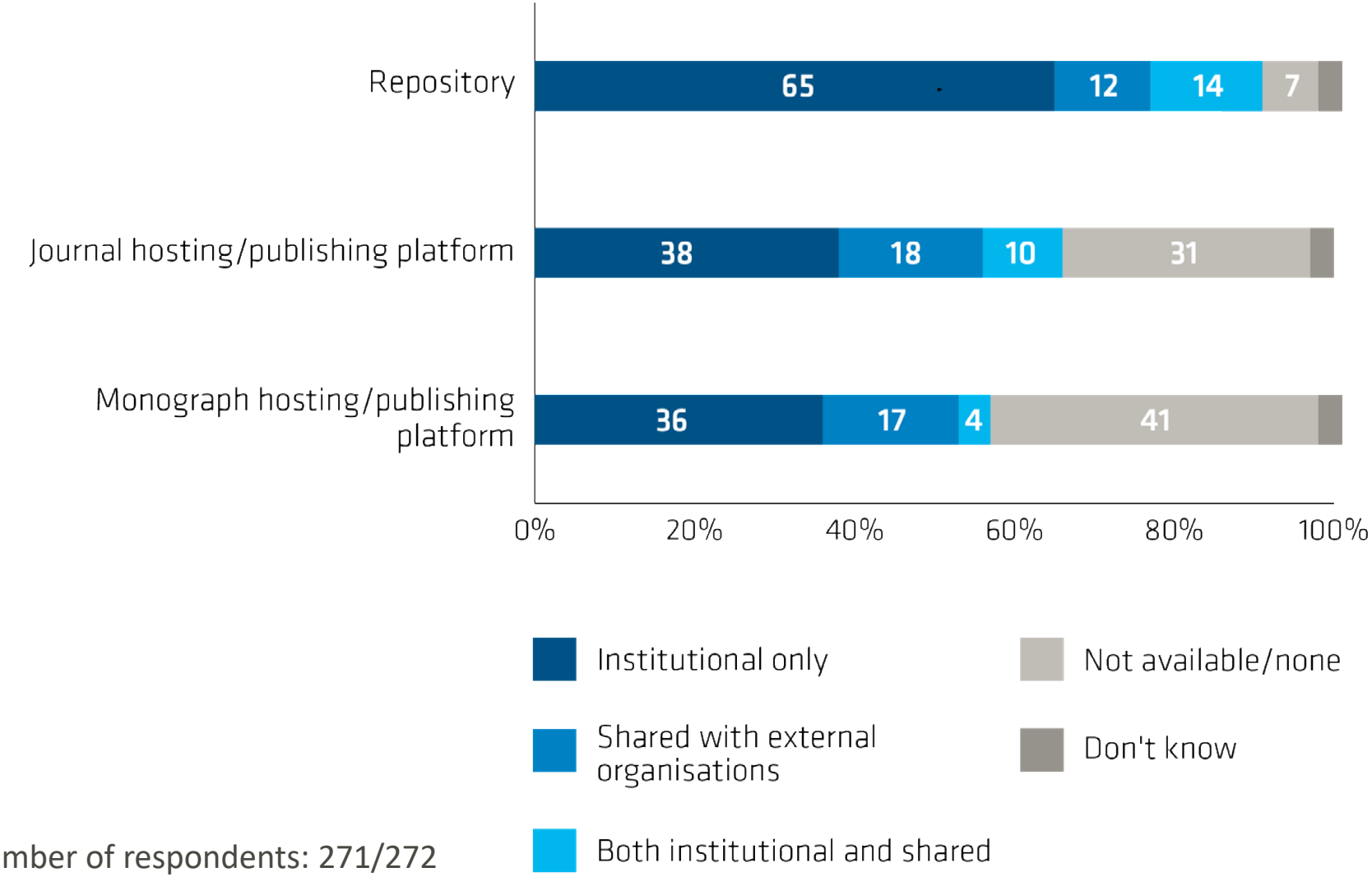
Number of respondents: 271/272

Existence of Open Access targets and monitoring mechanisms at institutional level



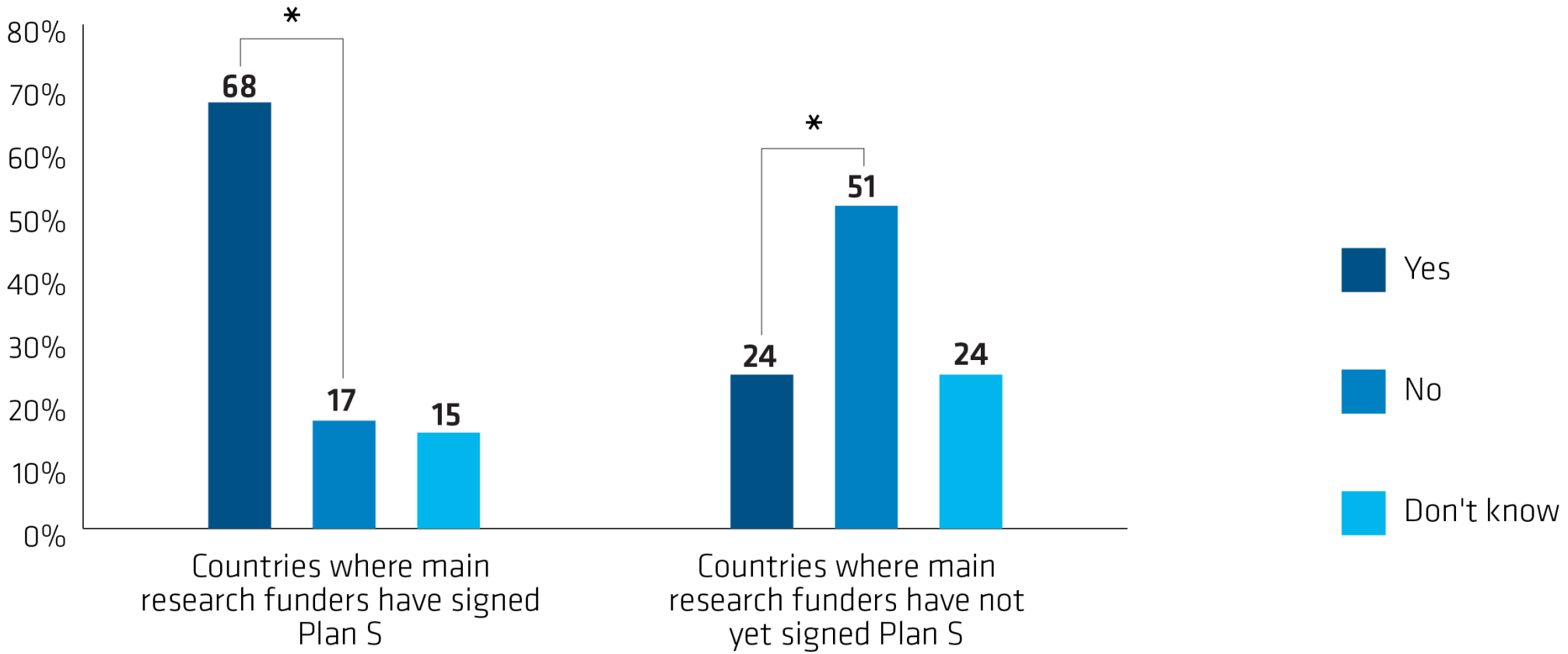
Number of respondents: 268-269/272

Infrastructure at institutional level: Open Access to research publications



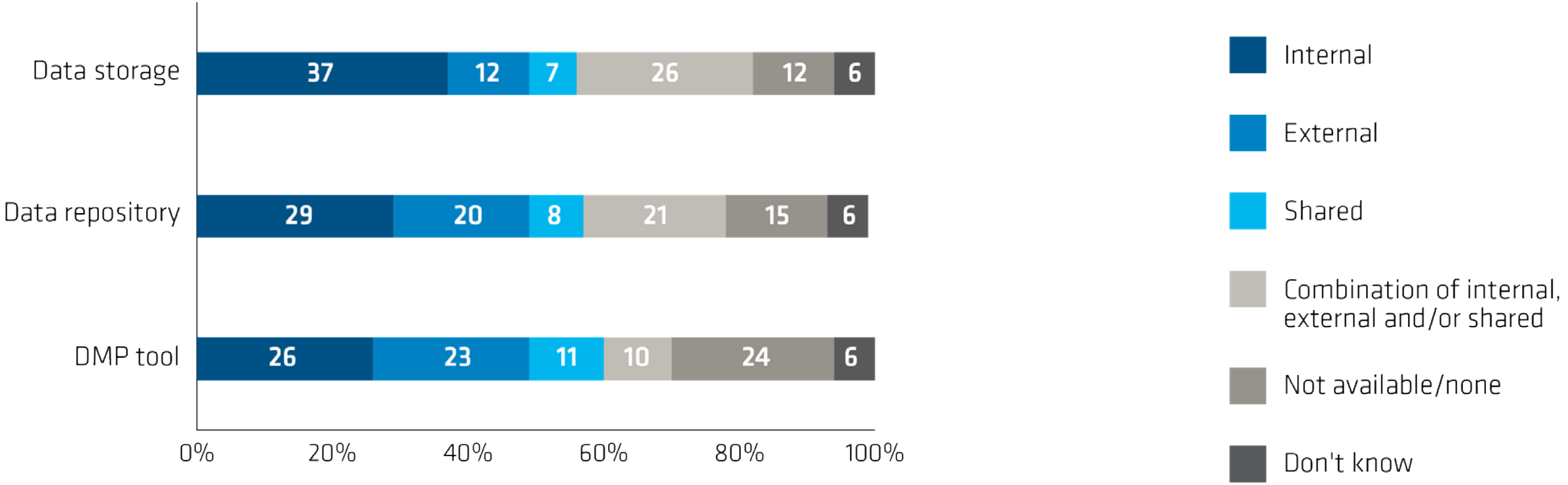
Number of respondents: 271/272

Preparations for the implementation of Plan S



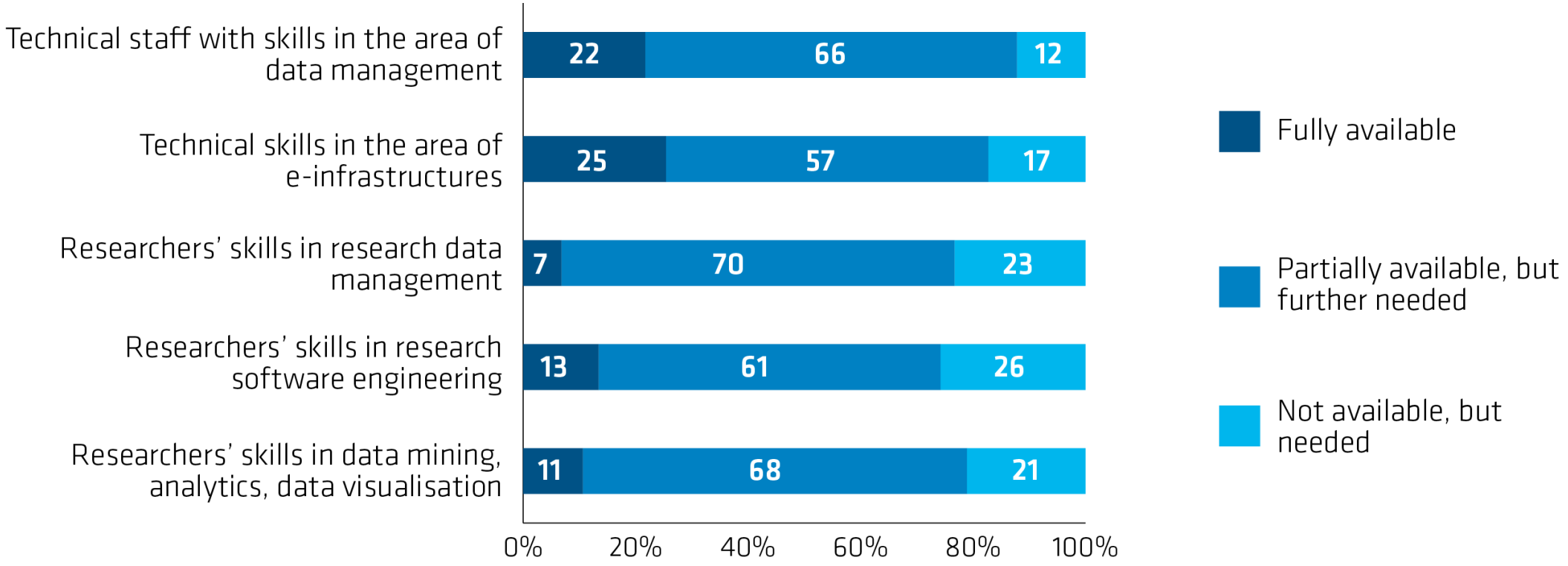
Number of respondents: 269/272; * Statistical difference: $\chi^2(2, N= 269)= 40.27, p= <.001, V= .38$

Infrastructure at institutional level: Research data



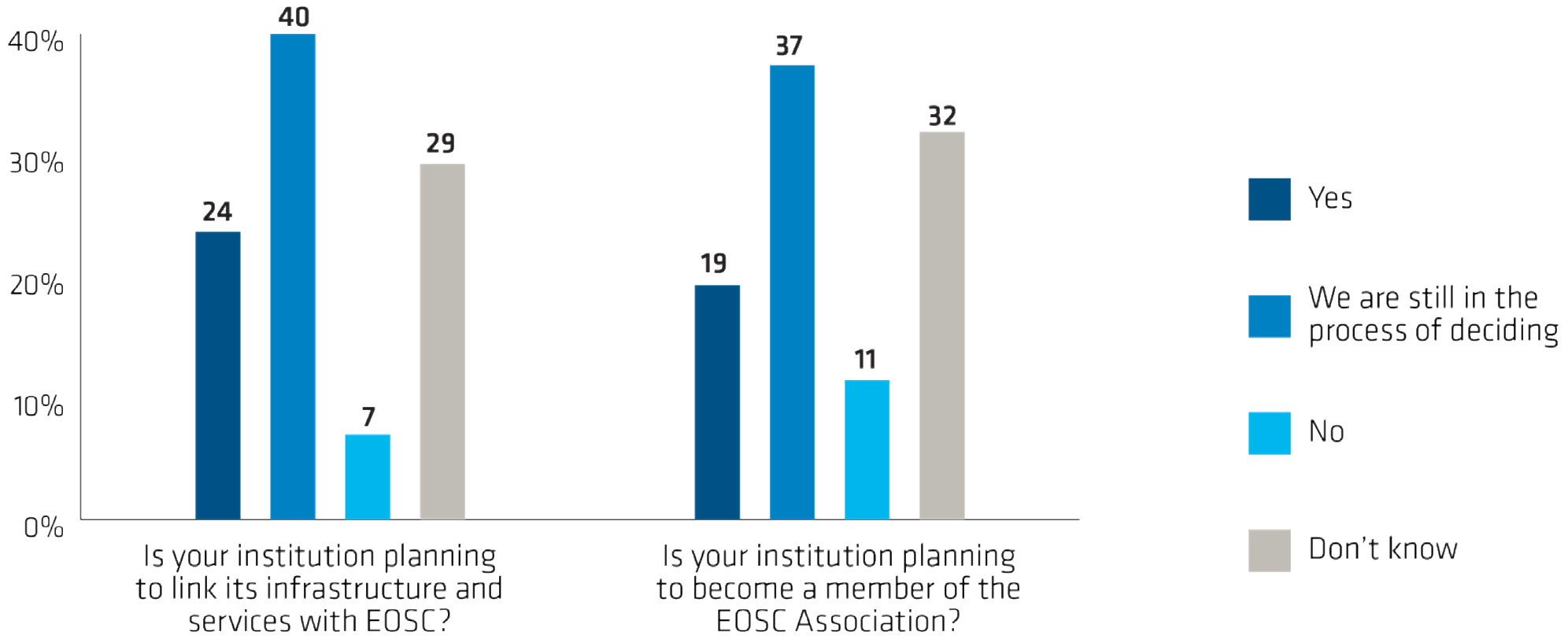
Number of respondents: 270/272

Availability of research data skills at the institution



Number of respondents: 217/254

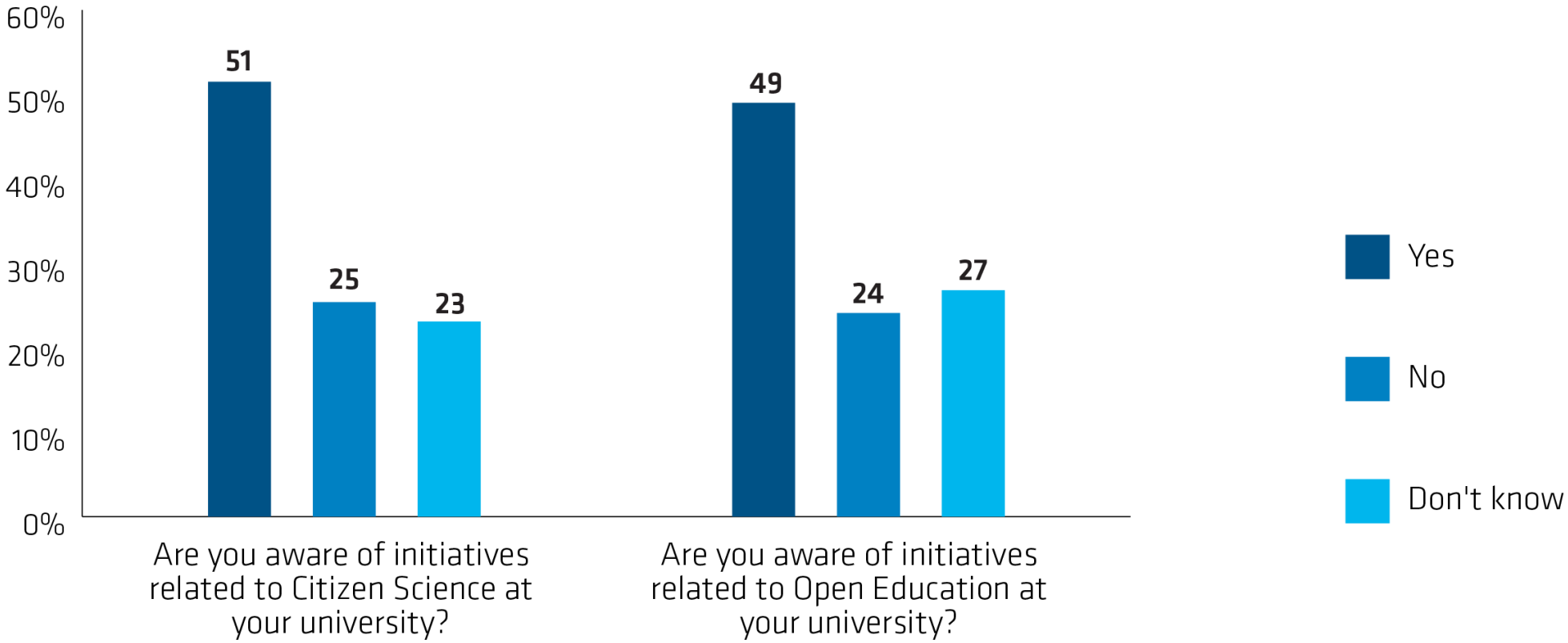
Future involvement in EOSC



Number of respondents: 270/272

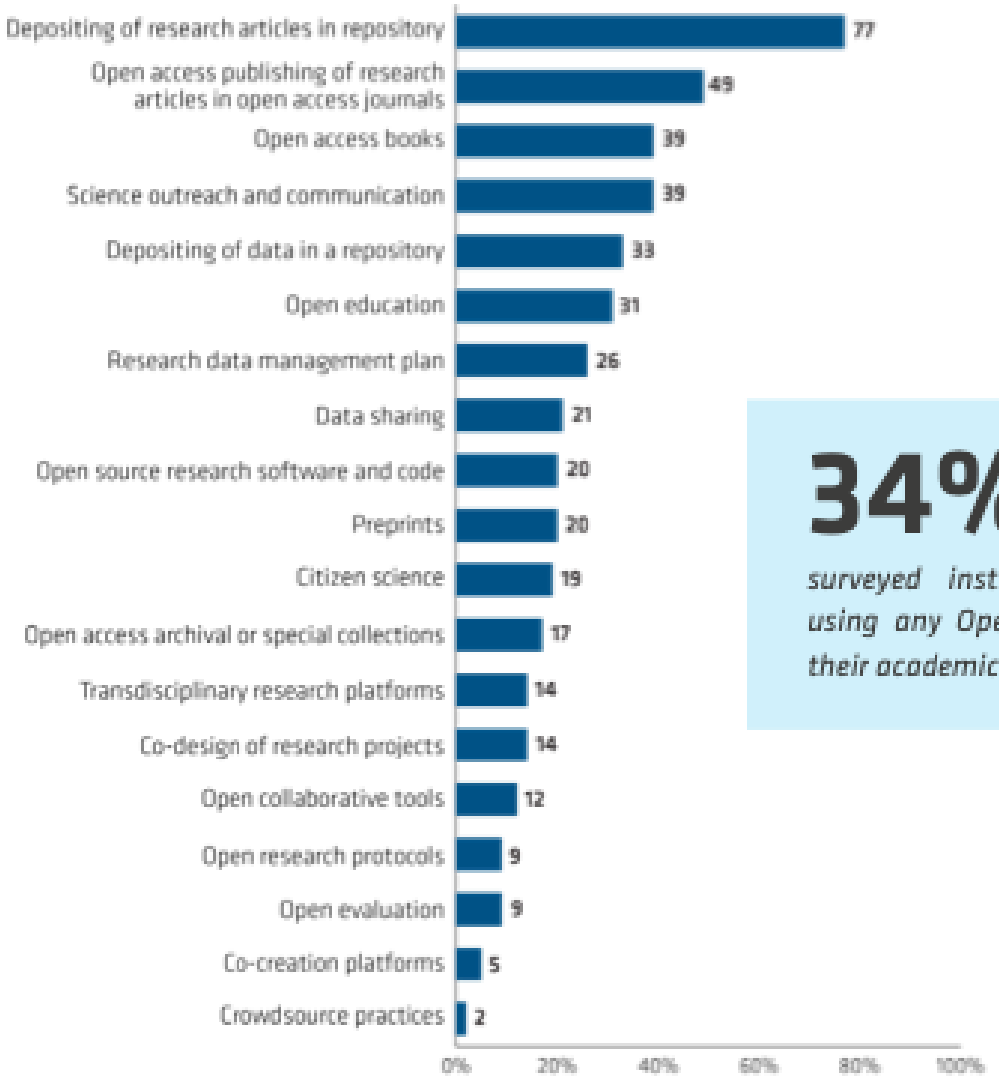
Note: 42 EUA members have joined EOSC (23 amongst the sample)

Institutional activities in emerging areas of Open Science



Number of respondents: 261-264/272

Open Science elements included in academic assessments

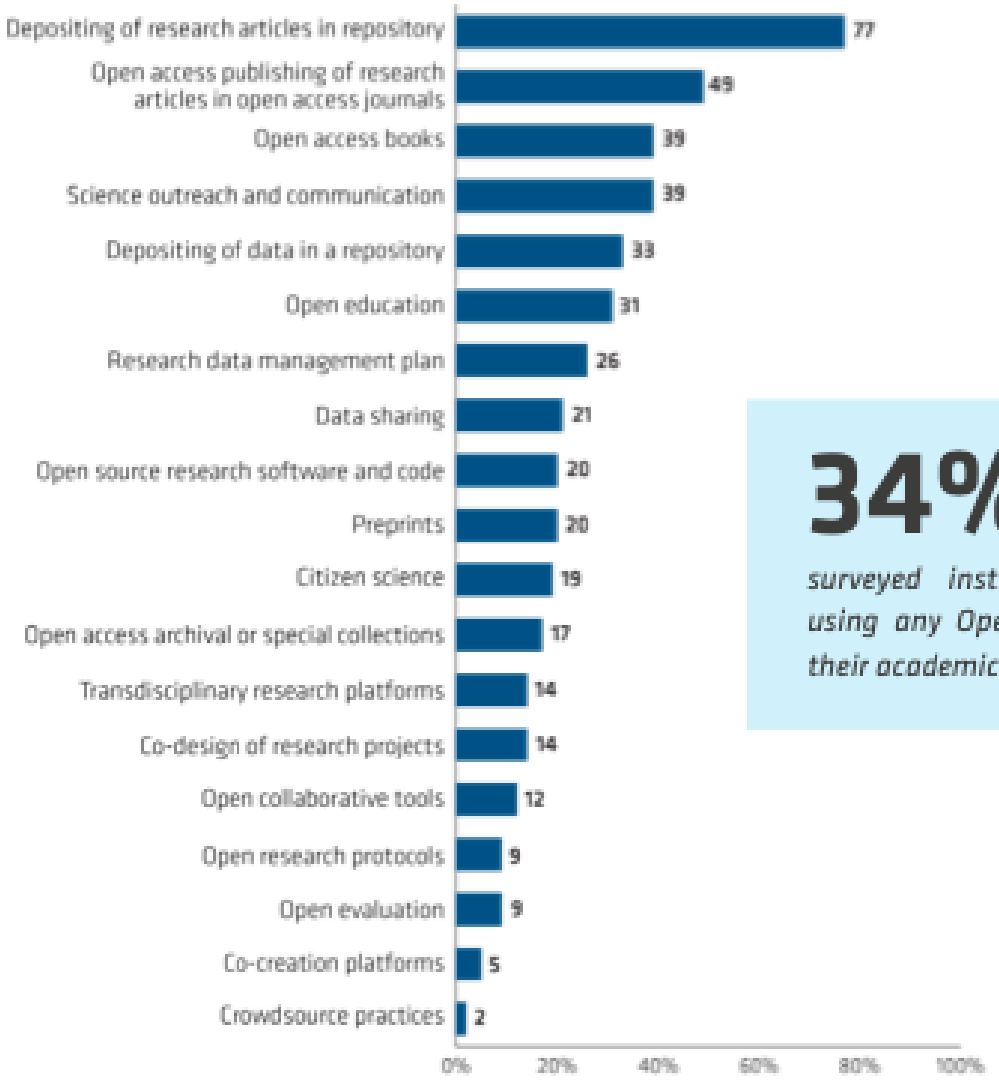


34%

surveyed institutions reported not using any Open Science elements in their academic assessments.

Number of respondents: 172/272. Only institutions that indicated using at least one Open Science element in their academic assessments are included in this Figure.

Open Science elements included in academic assessments



34%

surveyed institutions reported not using any Open Science elements in their academic assessments.

56% of institutions indicated planning to expand the range of Open Science activities considered in academic assessment in the future.

Number of respondents: 172/272. Only institutions that indicated using at least one Open Science element in their academic assessments are included in this Figure.

Main conclusions

- Although Open Science is seen as an important strategic priority (> 50% of the institutions), implementation lags behind. The gap between strategic importance and implementation is smaller in the established area of Open Access to research publications but gets much wider in data-related areas (e.g. RDM, FAIR data, data sharing), which are nevertheless given relatively high importance.
  - Could be due to different institutional awareness timelines and the varying national/European relevance of each area
- Institutions noted the need for more skills for researchers and research support staff to take advantage of Open Science, namely in data-related areas.
- There is a limited consideration of Open Science in academic assessments, showing how challenging it is for institutions to incentivise and reward Open Science.

Recommendations

1. Create the conditions to mainstream Open Science.
2. Continue to invest in embedding Open Science in institutional policies and practices.
3. Fully integrate Open Science in reward and incentive practices.

Thank you for your attention

Report available at www.eua.eu

Dataset available in Zenodo
(http:/doi.org/10.5281/zenodo.4966025)

Why Open Science ?

Question at the heart of the perennial debate between Cooperation and Competition

Possible barriers to Open Science

- The competition to publish in a top scientific journal is vital for many reasons (career, project funding, etc.). ➔ Assessment methods need to be reviewed.
- There are various fears and practical difficulties regarding data sharing. ➔ Need to monitor the evolution of open research data and to share good practices : cost, human skills, infrastructure, compliance with FAIR principles.

Possible barriers to Open Science

- The cost of the transition to open access to publications is still unclear ➔ Need to monitor the evolution of the economic models of OA scientific publications, as the EUA has done through its various actions on P&R models:

- Last year's Technopolis report on P&R
- The series of 4 webinars in June
- 5 of 6 surveys conducted by the EUA have focused on the evolution of Open Access in Europe.

EUA supports institutions in their path to Open Science

All comments and suggestions are welcome to help us continue to accompany Europe's universities and the scientific communities towards a rapid development of all aspects of open science, both at policy and implementation level.

Thank you for your attention

UPCOMING EVENTS

13-15 Sept	EUA-CDE Annual Meeting (online)
19-21 Oct	“Spotlight on recognition” Focus Group I and Spanish national workshop (online)
18-19 Nov	European Quality Assurance Forum (online)
29-30 Oct	“Spotlight on recognition” Focus Group II (Berlin)