



# TOWARDS AN AGREEMENT ON THE REFORM OF RESEARCH ASSESSMENT

DR. JAMES MORRIS  
SCIENCE EUROPE

31 MAY 2022

EUROPEAN RESEARCH ASSESSMENT  
REFORM: WHY AND WHEN?

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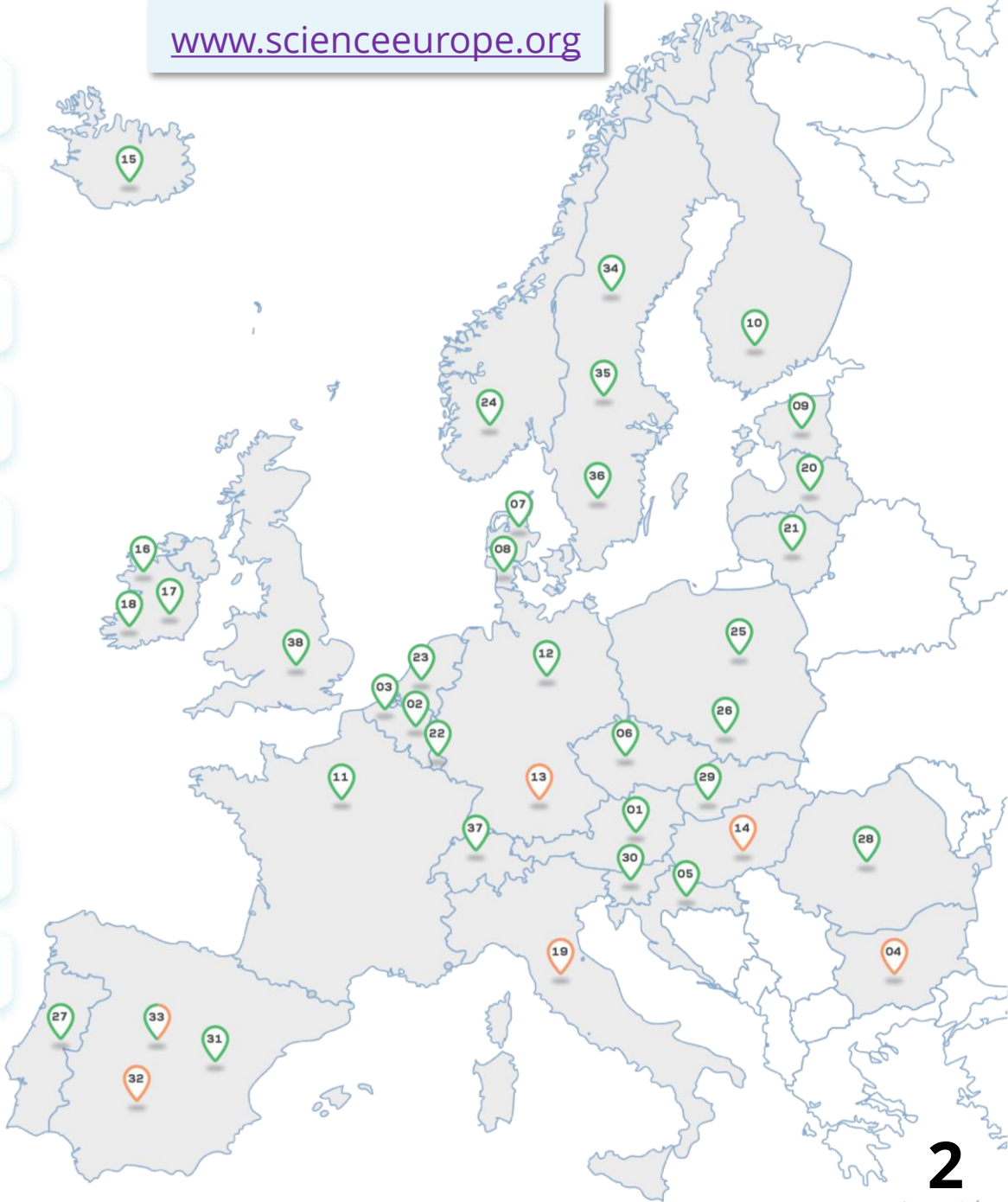
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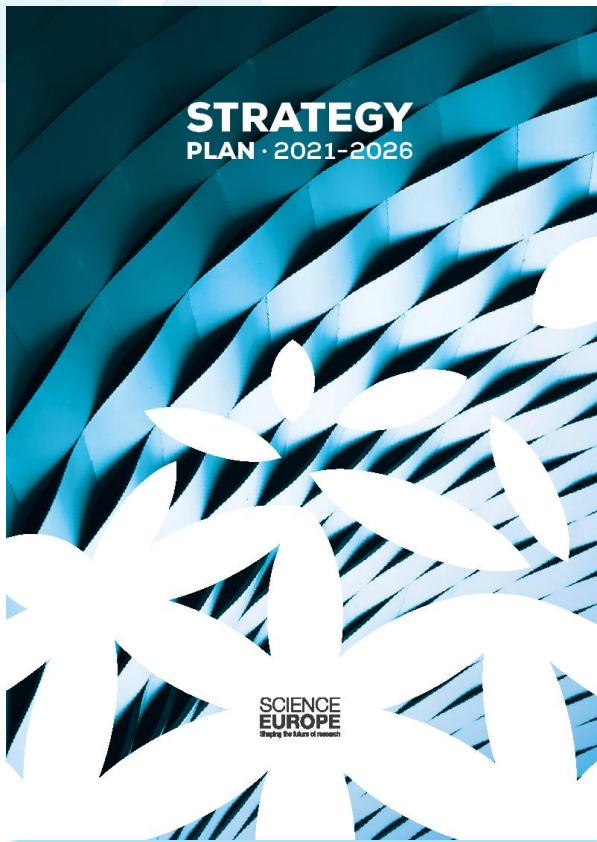
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RESEARCH FUNDING ORGANISATION

RESEARCH PERFORMING ORGANISATION

# Science Europe's Mission & Strategy



## SCIENCE EUROPE MISSION

Define long-term perspectives for European research and champion best-practice approaches, ensuring high quality science for the benefit of humanity and the planet.



# Science Europe's Mission & Strategy



## CONTRIBUTE TO THE EVOLUTION OF RESEARCH CULTURE

- Developing a '**values framework**' as a reference for policy/practice changes in research assessment. Building common understandings of **research quality, good research practice, and responsible research assessment, management, and governance**.
- Appraising current **recognition, rewards, and incentives systems** - formulating a set of guidelines aimed at broadening what is recognised as part of the modern research endeavour.
- **Reforming Research Assessment**

<https://scieur.org/strategy>

# Why is research assessment reform needed?

Research assessment represents a core activity of Research Funding and Research Performing Organisations, and National Ministries. It shapes many aspects of the research landscape and exerts influence over how research is performed and disseminated.



Research Assessment has been a long-standing priority topic of Science Europe, explored through various topics including: Research Impact ([2017](#)), Peer Review ([2015](#) and [2018](#)), and Gender Equality ([2017](#)) among others

# Why is research assessment reform needed?

Objective - to study how Science Europe Member Organisations (and invited external organisations) **select the best projects for funding and researchers for career progression** through their assessment processes, and whether these processes are **fair, transparent, effective, and efficient**.



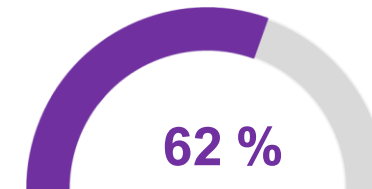
**Science Europe Study on Research Assessment Practices (2020)**  
DOI: [10.5281/zenodo.4915998](https://doi.org/10.5281/zenodo.4915998)

## Engagement

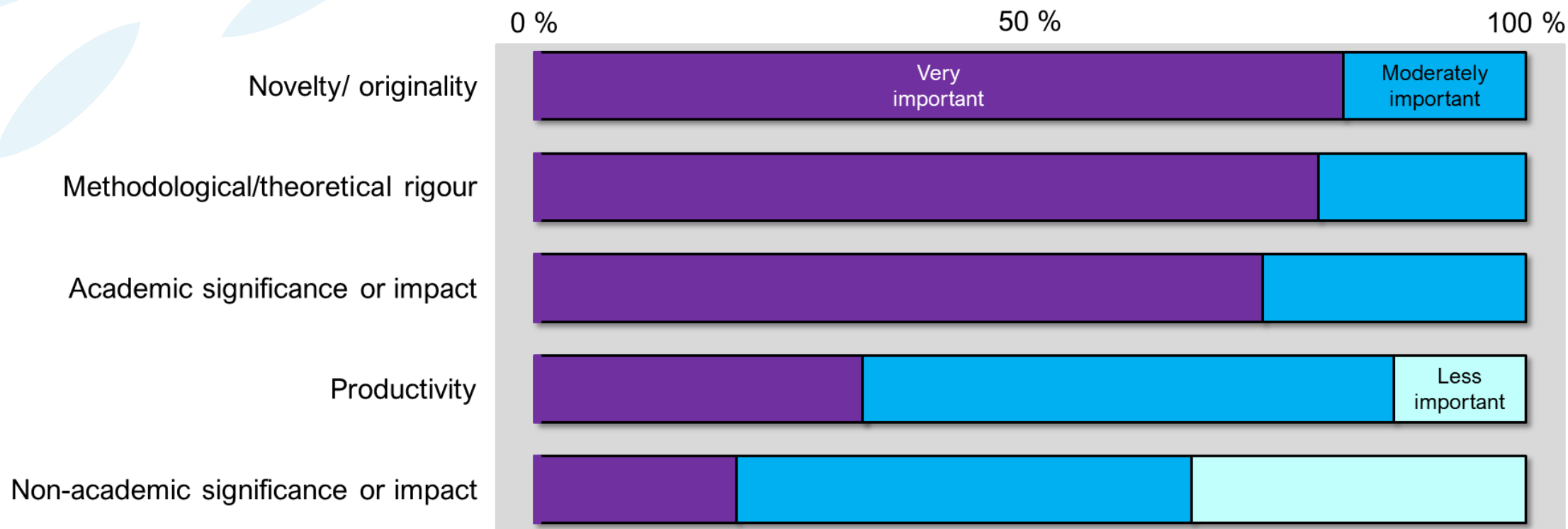
Organisation type	Response rate
Members	86% (32/37)
Non-members	86% (6/7) *
RFOs	97% (33/34)
RPOs	50% (5/10)
<b>Total</b>	<b>86% (38/44)</b>

\* Participating external organisations: European Research Council (EU), Weizmann Institute of Science (IL), Wellcome (UK), Czech Academy of Science (CZ), National Institute of Health (USA), and European Molecular Biology Organisation (DE)

# Question - How do organisations understand research quality?



of organisations do not have a formal definition of research quality



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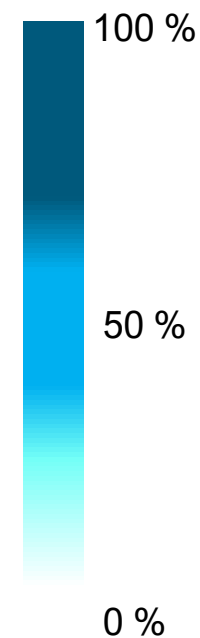
**Question** – What challenges face research organisations in the implementation of research assessments?

1. Research organisations describe the need for **continued effort in combating all forms of bias, discrimination, and unfair treatment**
2. Pressure exerted on assessment systems by **limited funds** and/or positions makes distinguishing and ranking proposals/applicants of **similar quality** (particularly around funding thresholds) more difficult.
3. The **cost and efficiency** of assessment systems is a major challenge (particularly for those that have moved towards more **qualitative assessments**).
4. Balancing the **effort and time burden of both applicants and reviewers** was also a common challenge described.



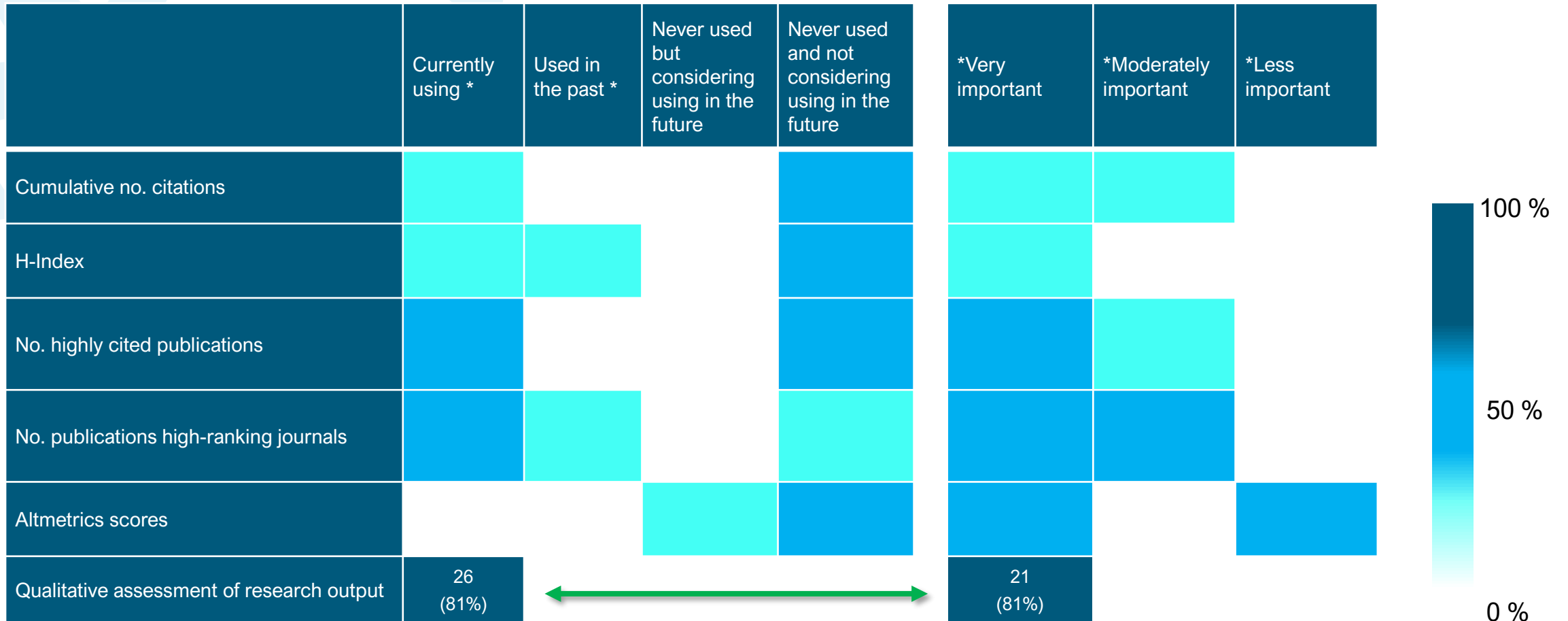
## Question – What author-level approaches/tools are used by the reviewers? ... and how important are they?

	Currently using *	Used in the past *	Never used but considering using in the future	Never used and not considering using in the future	*Very important	*Moderately important	*Less important
Cumulative no. citations	10 (31%)	5 (16%)	1 (3%)	16 (50%)	5 (33%)	5 (33%)	0 (0%)
H-Index	11 (34%)	7 (22%)	0 (0%)	14 (44%)	6 (33%)	3 (17%)	2 (11%)
No. highly cited publications	14 (40%)	5 (14%)	2 (6%)	14 (40%)	9 (47%)	5 (26%)	0 (0%)
No. publications high-ranking journals	17 (50%)	8 (24%)	0 (0%)	9 (26%)	12 (48%)	5 (20%)	0 (0%)
Altmetrics scores	2 (7%)	0 (0%)	9 (30%)	19 (63%)	1 (50%)	0 (0%)	1 (50%)
Qualitative assessment of research output	26 (81%)	0 (0%)	2 (6%)	4 (13%)	21 (81%)	4 (15%)	1 (4%)



**N = 39**

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Qualitative assessment is used by most and deemed very important

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Qualitative assessment of research output	26 (81%)			



**Publication metrics used in assessments:**

- Journal Impact Factor – 75 %
- H-Index – 70 %



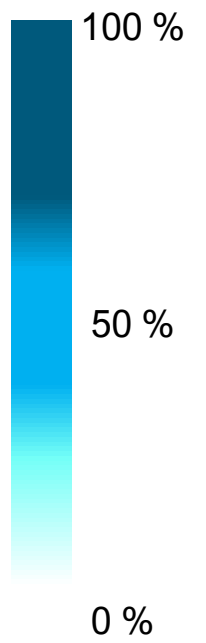
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<https://eua.eu/resources/publications/888:research-assessment-in-the-transition-to-open-science.html>

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Cumulative no. citations	10 (31%)	← →		16 (50%)
H-Index	11 (34%)	There is a split in organisation approaches to the use of tools		14 (44%)
No. highly cited publications	14 (40%)			14 (40%)
No. publications high-ranking journals	17 (50%)	← →		9 (26%)
Altmetrics scores				
Qualitative assessment of research output				

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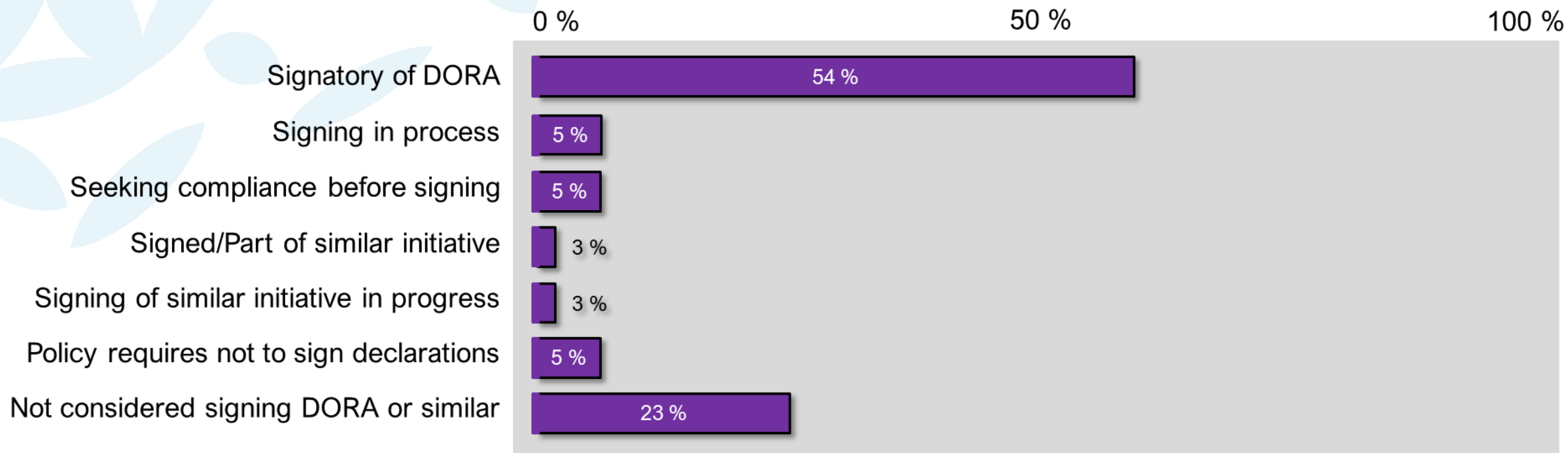


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## Question – Has your organisation joined/supported any initiatives related to research assessment?



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A shift in reducing reliance on quantitative metrics may be partly driven by community-level actions and declarations and initiatives



**Science Europe Position Statement on Research Assessment Practices (2020)**

DOI: [10.5281/zenodo.4916155](https://doi.org/10.5281/zenodo.4916155)



**TRANSPARENCY**

Assessment processes must be clear and transparent at all stages



**EVALUATING ROBUSTNESS**

Assessment processes should be monitored and evaluated, and best practices shared



**BIAS, DISCRIMINATION & UNFAIR TREATMENT**

Research organisations should publicly show how they address bias, discrimination and unfair treatment



**COST, EFFICIENCY & APPLICANTS' EFFORT**

Assessment processes should be streamlined and standardised to improve efficiency for all involved



**BROADENING THE POOL OF REVIEWERS**

Research organisations should consider broader selection criteria for reviewers and suitably recognise their work



**QUALITATIVE ASSESSMENTS**

Assessment processes should enable evaluations to focus on content and consider a wide range of research outputs and activities



**NOVEL APPROACHES**

Research organisations should consider novel approaches to assessments in an evidence-based manner and share their experiences

# Study & Recommendations summary

Assessment processes implemented by research organisations are mostly seen as effective, but with many known issues and challenges.

In the face of the many challenges expressed, from bias mitigation, to inefficiencies, and limited funding/over-competition, changes to policies and practices are periodically made and appraised.

Changes to assessment processes take place slowly and incrementally.

Many good practices exist, and Science Europe's recommendations on research assessment processes offer a current gold standard model.

However, the system is under a lot of strain, and **broader reform, at all levels, (including of assessment criteria) is needed.**

“The survey results show that reviewing approaches to research assessment is a **shared responsibility** and requires a **concerted approach** uniting the main actors. Internally, it requires intra-university dialogue between researchers, research support staff and university leadership. Externally, it requires universities and their main partners, notably governments and research funding organisations, to **engage with each other.**”





# All signs point to the need for broad reform



LEIDEN MANIFESTO FOR RESEARCH METRICS



HONG KONG PRINCIPLES

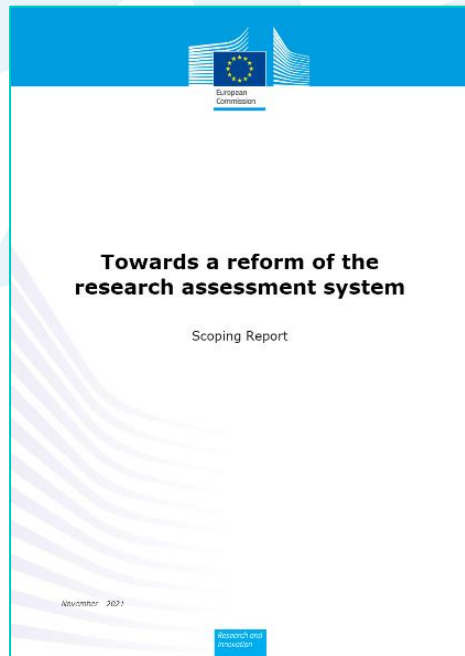
**The Metric Tide**

RoRI Working Paper No.3  
**The changing role of  
funders in responsible  
research assessment:**



...

# The Reform of Research Assessment Initiative



The Scoping Report set out key principles for reform that are very much in line with Science Europe's own work:

- Comply with ethics and integrity rules and practices
- Safeguard freedom of scientific research
- Respect the autonomy of research organisations
- Ensure independence and transparency of the data, infrastructure and criteria necessary for research assessment
- Focus research assessment criteria on quality
- Recognise contributions that advance knowledge and create impact
- Recognise the diversity of research activities and practices
- Use assessment criteria and processes that respect the variety of scientific disciplines, research types
- Ensure gender equality, equal opportunities and inclusiveness

# Reform and Research Culture

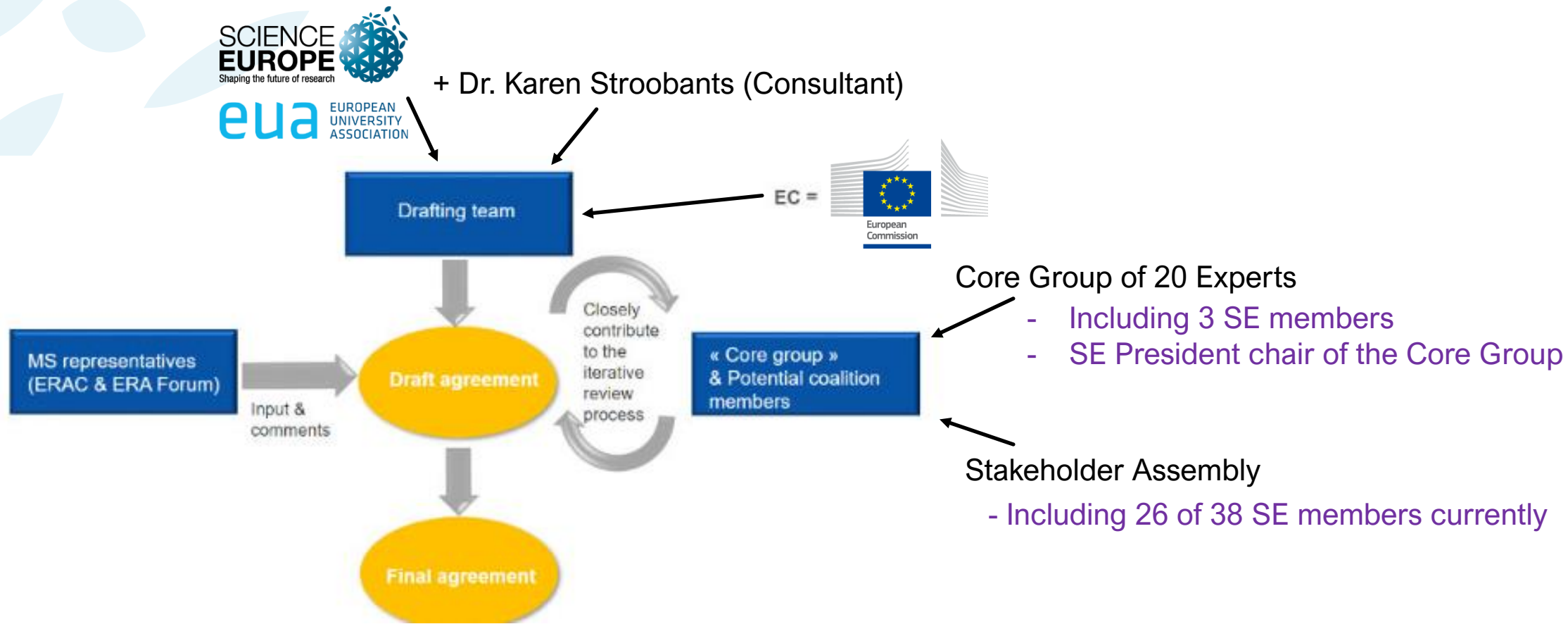
“We envisage a research culture in the European Research Area where a) **all participants** in the research endeavour are **appropriately recognised** for their **diverse contributions**, b) the **broad skills and competencies** of researchers are fostered and supported by **suitable training, appropriate infrastructure, and responsible management and governance**, c) **research integrity and high ethical standards** are promoted effectively, and d) careers in research are **attractive and sustainable**.”



Science Europe Statement (Nov 2021)

DOI: [10.5281/zenodo.5726893](https://doi.org/10.5281/zenodo.5726893)

# The Reform of Research Assessment Initiative



# The Reform of Research Assessment Initiative

Aside from Science Europe's direct engagement in the initiative, we have also been discussing progress with our internal Working Group on Research Culture:

- 26 of 38 Science Europe Member Organisations have already expressed interest.
- There is broad agreement with all the current commitments, and it is important to recognise that many organisations are already making good progress.
- It is welcomed that this initiative goes further than others in requiring action.
- The proposed timelines for reform are reasonable and inclusive.
- A key function of the eventual coalition will be as a platform for knowledge exchange and mutual learning.

# The Reform of Research Assessment Initiative

Key considerations that still remain:

- Strong links between the coalition and member states are needed, particularly regarding any legal and administrative barriers to reform that may exist.
- At an ERA level, links to other initiatives are vital, especially Action 4 on research careers.
- The initiative has started in Europe, but for its success it must also be global in scope.
- Although many good practices exist, there is no clear new system to aim for. This is an important initial step for the coalition.
- True reform also requires culture shifts - this can take time.
- The initiative and eventual coalition must involve the voice of researchers.

**THANK YOU FOR  
YOUR ATTENTION**

