



# Science Europe Approach to Research Assessment



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# SE Members and Research Assessment

- ▶ Assessing the quality of science is a **common and essential task** for SE Members. For funders it is THE core mission.
- ▶ Done for **several purposes**:
  - ▶ allocation of competitive research funds;
  - ▶ selection of candidates for recruitment or promotion;
  - ▶ evaluating research groups and larger research units and organisations.
- ▶ SE Members seek to ensure their assessment processes are **robust, fair and successful** in identifying the best people, ideas and institutions in terms of **scholarly quality**, recognising that research quality cannot be reduced to a single type of output.

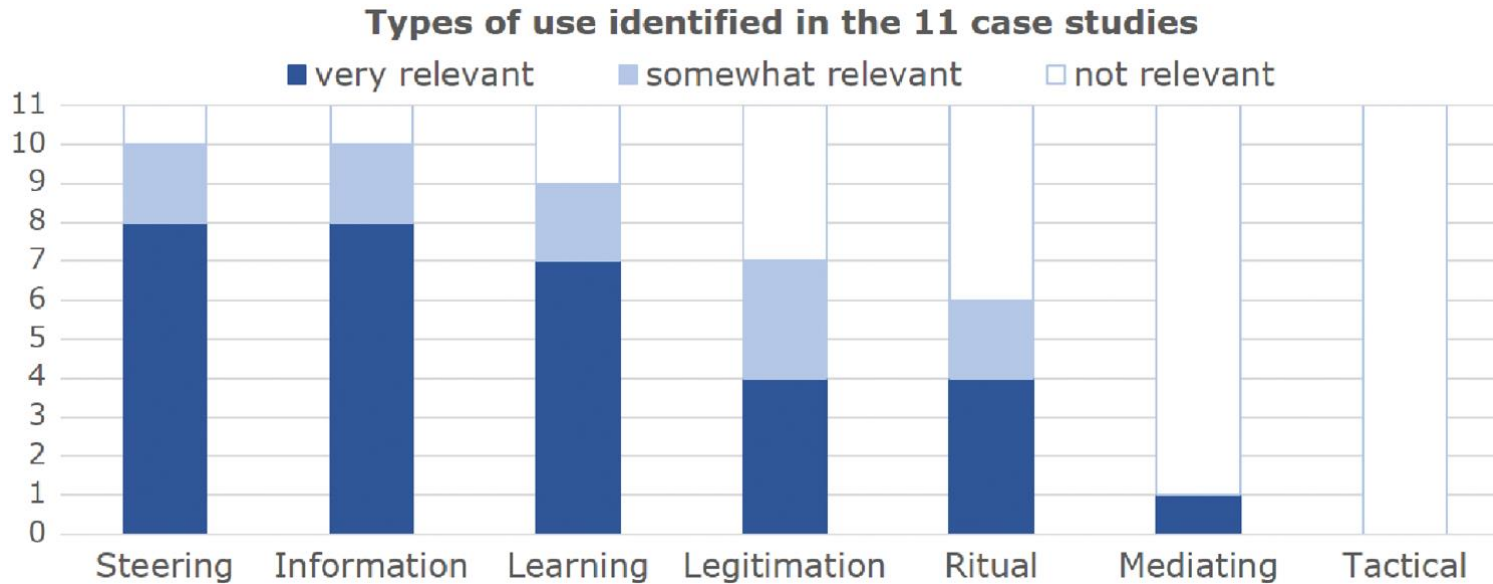
# Science Europe Member Organisations 2019

Austria	FWF	Latvia	LZP	 RFO
Belgium	FWO, F.R.S.-FNRS	Lithuania	LMT	 RPO
Bulgaria	<b>BAS</b>	Luxembourg	FNR	
Croatia	HRZZ	Netherlands	NWO	
Czech Republic	GACR	Norway	RCN	
Denmark	DFF, DG	Poland	NCN, FNP	
Estonia	ETAG	Portugal	FCT	
Finland	AKA	Slovakia	APVV	
France	ANR	Slovenia	ARRS	
Germany	DFG, <b>MPG, Leibniz</b>	Spain	<b>CSIC</b>	
Hungary	<b>MTA</b>	Sweden	FORMAS, FORTE, VR	
Iceland	Rannís	Switzerland	SNSF	
Ireland	HRB, IRC, SFI	United Kingdom	UKRI	
Italy	<b>INFN</b>			

# Uses of research evaluations by RFOs and RPOs

- ▶ **Legitimation:** e.g. justifying the use of public funds;
  - ▶ **Evidence base:** taking decisions (funding, planning, recruiting, promoting, etc.);
  - ▶ **Information:** providing decision-makers or the public with information on how public funds are being used and to what effect
  - ▶ **Learning:** for funders & decision-makers in the field of science, innovation or technology policy, intermediaries, universities, research institutions, enterprises, consultants, and scientists
  - ▶ **Steering:** establishing policy objectives and planning measures to reach them
  - ▶ **Mediating:** between the competing interests of different players
  - ▶ **Tactical:** to gain time or avoid responsibility
  - ▶ **Ritual:** systematic evaluation at certain intervals/on certain occasions.
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- ▶ Source: Milzow, Reinhardt, Soederberg, Zinoecker Research Evaluation, Volume 28, Issue 1, January 2019, Pages 94–107, (based on work done in the Science Europe Working Group on Research Evaluation)

# SE WG case studies:



## A diversity of approaches

- ▶ Qualitative;
- ▶ Quantitative;
- ▶ By peers;
- ▶ By non-peers;
- ▶ One-stage or two-stage;
- ▶ Artificial Intelligence;
- ▶ Random allocations (lotteries, etc.);

# Challenges for RFOs and RPOs

Growing demand:

- ▶ The volume of assessments;
- ▶ Changing in research practice: Open Access, Open Science, diversity, interdisciplinary research (i.e. policy demand)

Limited supply:

- ▶ The availability of evaluators in human-based assessments (peer-review);
- ▶ The availability of adequate information, data and methods;
  
- ▶ Push towards proxies and less resource intensive methods;

## The cure is worse than the disease

- ▶ Traditional **proxies**, such as publications in high-impact journals and h-index, offer a degree of comparability and objectivity.
- ▶ But do not always provide an adequate measure of quality of research outputs.
  - ▶ **cover a small part of a much broader range** of valuable scientific achievements;
  - ▶ can incentivise **unintended behaviours** that can be detrimental to knowledge creation and circulation.
- ▶ But there is some value to bibliometric, if used correctly:
  - ▶ to rank research projects and researchers with equal ‘scores’;
  - ▶ To reduce **potential hidden biases** in human processes.



## Plan S and DORA – A Stronger Impetus?

- ▶ A series of recent initiatives have created an impetus to revise the current rewards and incentives system of science, and particularly the criteria used to evaluate research proposals and researchers.
- ▶ Plan S and San Francisco **D**eclaration **o**n **R**esearch **A**ssessment: move away from assessment processes that are based solely on journal-based metrics.
- ▶ Plan S:
  - ▶ reward system is misguided and puts emphasis on the wrong indicators, hindering Open Access (among other things);
  - ▶ Plan S funders commit to revising the incentive and rewards system of science, using the DORA as a starting point.

# SE Activity on Research Assessment – Objectives

- ▶ Long-term objective: ensuring and assessing the quality of science.
- ▶ Science Europe aims to:
  - ▶ anchor the **importance of research quality** in the relevant policy debates in Europe;
  - ▶ continually **improve the framework conditions** for performing and funding high quality science in Europe: including Open Science.
- ▶ Science Europe will foster policies that:
  - ▶ Reward and incentivise **research quality** as the fundamental principle of research funding and policy.
  - ▶ Support **Open Science**, as a driver for quality;
  - ▶ Support the necessary changes in research assessment that are conducive to selecting the best proposals and researchers.
  - ▶ Recognise appropriately the diversity of research outputs and their respective value.



# Science Europe's Activity on Research Assessment – Scope and Study

- ▶ In 2019 SE set up a Task Force to provide strategic guidance and expert advice.
- ▶ Develop a reliable and robust knowledge base in the form of a **study of research assessment practices**.
- ▶ Activity will focus on:
  - ▶ How researchers and proposals are assessed.
  - ▶ Experiments and novel processes that research organisations have been tested.
  - ▶ How research organisations ensure the robustness of their selection processes.
- ▶ Building on the results of the study, **recommendations will be formulated**.

## A consultative process

- ▶ Science Europe will organise consultations and exchanges with the research community and academic experts on research assessment.
- ▶ EUA and SE will maintain a continuous dialogue and share information with each other, with the view to promoting strong synergies between the rewards and incentives structures of research funders, universities and research performing organisations.