Research Evaluation, Reputation Systems, and Openness

A Presentation Blueprint on the San Francisco Declaration on Research Assessment (DORA) and the Coalition for Advancing Research Assessment (CoARA)

Prepared by the Helmholtz Open Science Office

Last revised August, 2023

Helmholtz Open Science Office

Helmholtz Open Science Office

- Service provider that supports the community in shaping the cultural change towards open science.
- Mission: To promote the cultural change towards open science.
- Established by the Helmholtz Association in 2005.

Enabling Open Science practices in Helmholtz!

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Helmholtz Open Science Policy
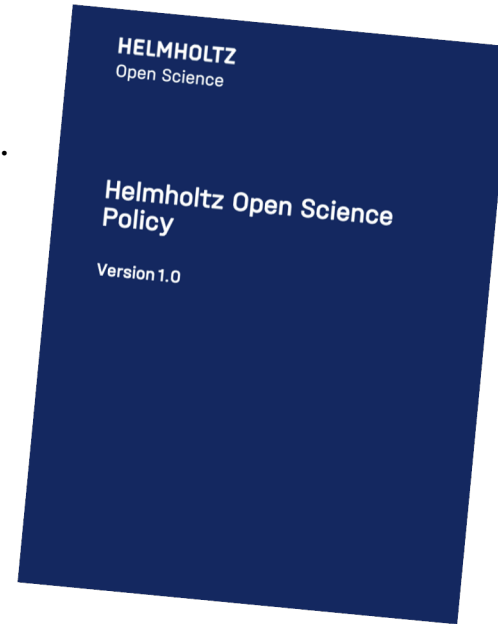
Version 1.0

Helmholtz-Gemeinschaft (Ed.) (2022): Helmholtz Open Science Policy. Version 1.0. Approved in the 119th General Assembly of the Helmholtz Association on 20-21 September 2022, Helmholtz-Gemeinschaft, 9 p.
https://doi.org/10.48440/os.helmholtz.056

Task Group Helmholtz Quality Indicators for Data & Software

- Members from all Helmholtz Centers
- Supported by further experts from the Centers

https://os.helmholtz.de/en/open-sciece-in-helmholtz/working-group-open-science/task-group-quality-indicators/

Helmholtz Open Science Office | Open Science in Helmholtz
| Working Group Open Science

Task Group Helmholtz Quality Indicators for Data and Software Products

Goals of the Task Group

The Task Group Helmholtz Quality Indicators for Data and Software Products of the Working Group Open Science of the Helmholtz Association is dedicated to the development of Helmholtz Quality Indicators for Data and Software Products.

Duration

Ongoing since March 2022.

Task Group Helmholtz Quality Indicators for Data & Software

- Entry-level indicator: Number of citable published research data and research software publications.

- Must be stored in a repository with metadata and assigned an identifier (DOI).

- Has been recorded for the first time in 2022 (progress reports).

- Only used internally.

- In spring 2024, entry-level indicator and quality indicator will be further discussed.

- Indicator should be part of the PoF indicator set starting in 2025 (reporting year 2024).

Overview

San Francisco Declaration on Research Assessment (DORA)

- Organization and Initiative

- Resource Library and Case Studies

- Outlook and Activities

Coalition for Advancing Research Assessment (CoARA)

- Organization and Initiative

- History and Developments

- Outlook and Activities

DORA

San Francisco Declaration on Research Assessment

San Francisco Declaration on Research Assessment (DORA)

What? Recommendations to improve the ways in which the output of scientific research is evaluated by funding agencies, academic institutions, and other parties.

Where and when? Developed in 2012 during the Annual Meeting of the American Society for Cell Biology in San Francisco.

How? Advance practical and robust approaches to research assessment globally and across all scholarly disciplines.

Who? DORA has been signed by 23,302 individuals and organizations from 161 countries; 61 organizations from Germany have signed (status June 23, 2023).
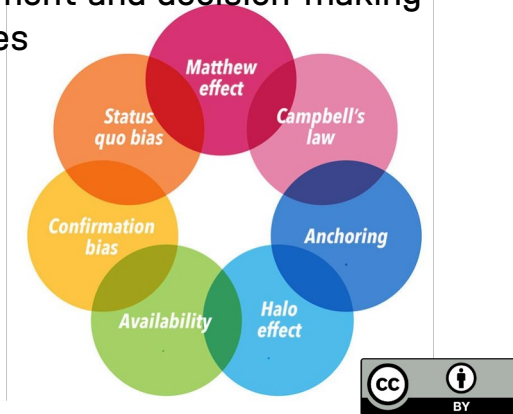
https://sfdora.org/

DORA Resource Library
Supporting collection of materials to develop policies and practices for responsible research assessment

Unintended biases

Creating new structural and institutional conditions to reduce judgment and decision-making biases

Hatch, A and R. Schmidt. (2020) Rethinking Research Assessment: Unintended Cognitive and System Biases. DORA. http://sfdora.org/wp-content/uploads/2020/11/DORA_UnintendendedCognitiveSystemBiases.pdf

Open Reviewers Toolkit

A collection of open tools and resources developed by the PREreview Open Reviewers team to guide constructive, clear, and conscientious manuscript peer review.

OPEN REVIEWERS
TOOLKIT

https://prereview.org/
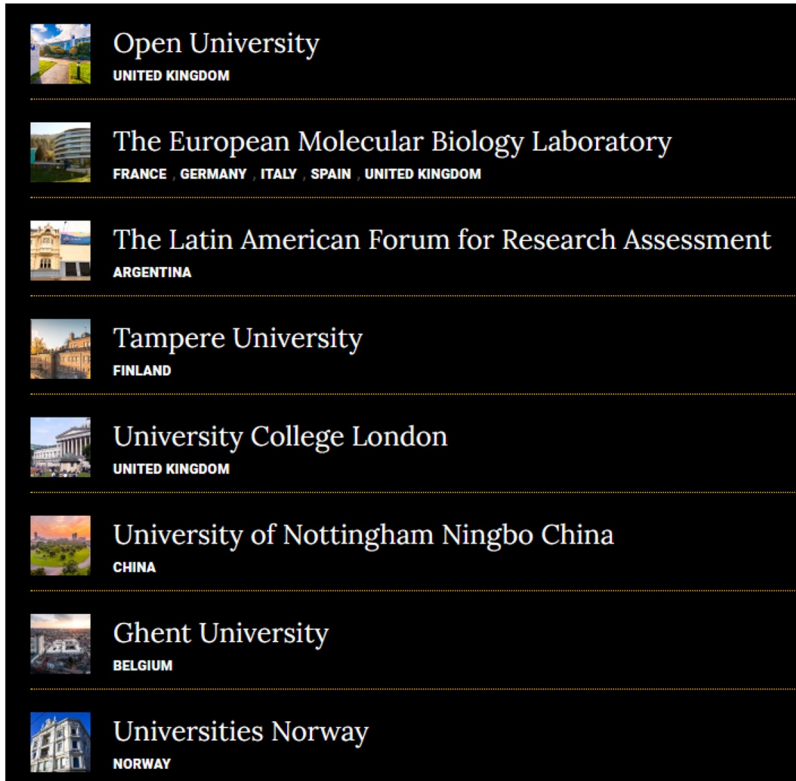https://content.prereview.org/open-reviewers-toolkit-is-now-openly-available/
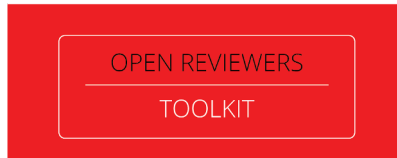
5 Principles to help institutions experiment with and develop better research assessment practices

Hatch, A and R. Schmidt. (2020) Rethinking Research Assessment: Ideas for Action. DORA. http://sfdora.org/wp-content/uploads/2020/11/DORA_IdeasForAction.pdf

5 COMMON MYTHS ABOUT EVALUATION

Hiring, promotion, and tenure decisions are largely made on "merit."

Quality research is easy to recognize and rises to the top

JIF and other similar journal-based indicators measure research quality

Researchers mostly care about journal reputation

Assessment practices will naturally improve over time

DORA Case Studies

Stories of innovation and change to improve academic career assessment

Open University
UNITED KINGDOM

The European Molecular Biology Laboratory
FRANCE , GERMANY , ITALY , SPAIN , UNITED KINGDOM

The Latin American Forum for Research Assessment
ARGENTINA

Tampere University
FINLAND

University College London
UNITED KINGDOM

University of Nottingham Ningbo China
CHINA

Ghent University
BELGIUM

Universities Norway
NORWAY

Example

EMBL The European Molecular Biology Laboratory

- Intergovernmental life sciences research organization in in Europe (France, Germany, Italy, Spain, UK)
- Signed DORA in 2018
- 2020 a process of development and implementation started
- Developed guidelines for research assessment including EMPLs practices for recruitment, performance review, and promotion

https://sfdora.org/dora-case-studies/
https://sfdora.org/case-study/the-european-molecular-biology-laboratory/

DORA's 10th Anniversary

From declaration to global initiative: a decade of DORA

DORA 10

The San Francisco Declaration on Research Assessment (DORA) will be 10 years old on May 16, 2023.

To mark the occasion, we invite the worldwide community to join with us in organizing a week of events to examine both DORA's impact on the reform of research assessment and the challenges that still lie ahead. The momentum for change is building across the globe, but we need to keep pushing together to achieve our goals!

https://sfdora.org/dora-10th-anniversary-events/

DORA: Outlook and Further Activities

DORA Strategic Plan 2023-2026

[DORA Strategic Plan 2023-2026](#)

- signing DORA is only a first step
- → changes in processes and cultural change

Objectives:

1. increase awareness of the negative impacts of research assessment practices
2. work to accelerate the development of clear and concrete measures to reform research assessment
3. support advocates of research assessment reform worldwide
4. secure the funding needed to deliver DORA's mission as efficiently and as rapidly as possible

Tools to Advance Research Assessment (TARA) is a project to facilitate the development of new policies and practices for academic career assessment.

Dashboard
An interactive online dashboard that tracks criteria and standards academic institutions use for hiring, review, promotion, and tenure around the world.

Toolkit
A toolkit of resources informed by the academic community to support academic institutions working to improve policy and practice.

Survey
A survey of U.S. academic institutions to gain a broad understanding of institutional attitudes and approaches to research assessment reform.

Tools to Advance Research Assessment (TARA): https://sfdora.org/project-tara/

CoARA

Coalition for Advancing Research Assessment

Coalition for Advancing Research Assessment CoARA

https://coara.eu/
https://os.helmholtz.de

Coalition for Advancing Research Assessment CoARA

Signatories of CoARA agree that the practice of research assessment needs to be reformed.

The vision is to recognize diverse outcomes, practices, and activities when evaluating research, researchers, and research institutions in order to maximize the quality and impact of research.

This requires basing assessment primarily on qualitative judgement, for which peer review is central, supported by responsible use of quantitative indicators.

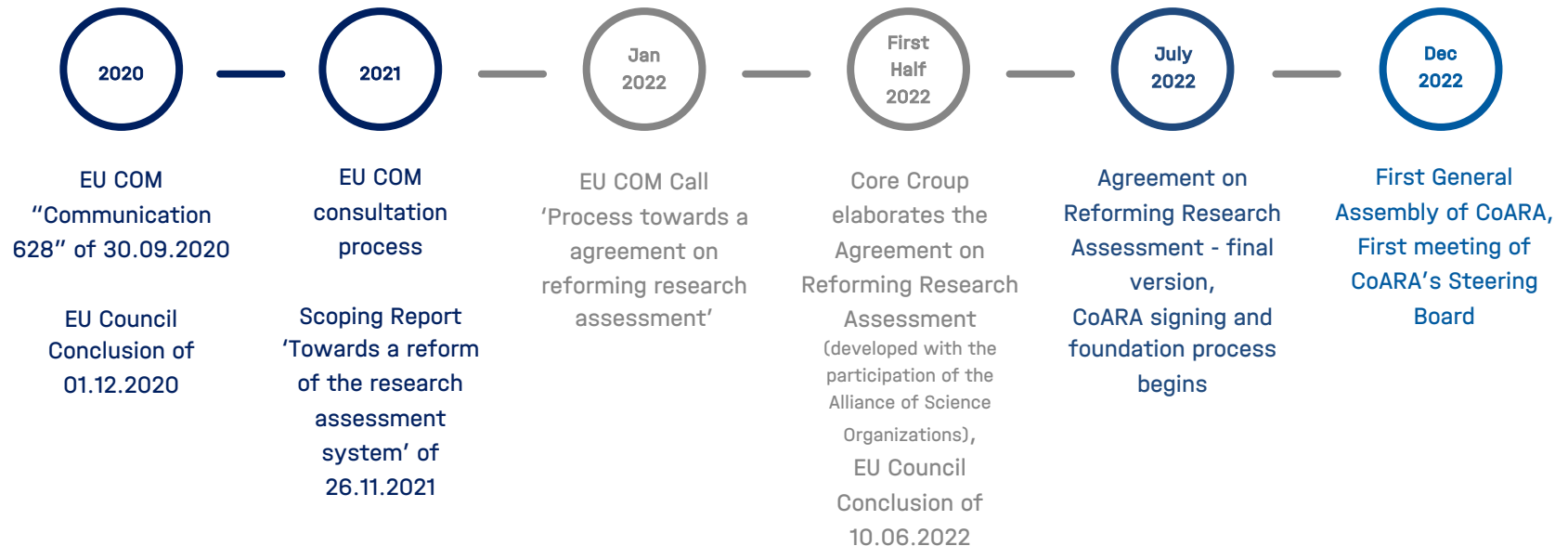Among other purposes, this is fundamental for:

- deciding which researchers to recruit, promote or reward
- the selection of research proposals to be funded
- the identification of research units and organisations to be supported

Diversity in Research Assessment

Assessment of	Carried out by	Purposes
Research institutions and research units	Assessment authorities, research funding and performing organisations	Allocation of funding, account for public investments, make decisions about research priorities, and improve the definition and implementation of research strategies
Research projects	Assessment authorities, research funding and performing organisations, and prize awarding organisations	Allocation of funding, informing project management and future research funding decisions, making prize and award decisions
Individual researchers and research teams	Research funding and performing organisations and prize awarding organisations	Allocation of funding, recruitment and hiring promotion, professional development review, prize and award decisions

History of CoARA

2020

EU COM "Communication 628" of 30.09.2020

EU Council Conclusion of 01.12.2020

2021

EU COM consultation process

Scoping Report 'Towards a reform of the research assessment system' of 26.11.2021

Jan 2022

EU COM Call 'Process towards a agreement on reforming research assessment'

First Half 2022

Core Croup elaborates the Agreement on Reforming Research Assessment (developed with the participation of the Alliance of Science Organizations), EU Council Conclusion of 10.06.2022

July 2022

Agreement on Reforming Research Assessment - final version, CoARA signing and foundation process begins

Dec 2022

First General Assembly of CoARA, First meeting of CoARA's Steering Board

The Agreement in a Nutshell

- Based on 10 commitments, it establishes a common direction for research assessment reform, while respecting organizations' autonomy.

- The agreement on Reforming Research Assessment sets a shared direction for change in assessment practices for research, researchers, and research performing organizations, with the overarching goal to maximise the quality and impact of research.

- The agreement includes the principles, commitments, and timeframe for reforms and lays out the principles for a coalition of organizations willing to work together in implementing these changes.
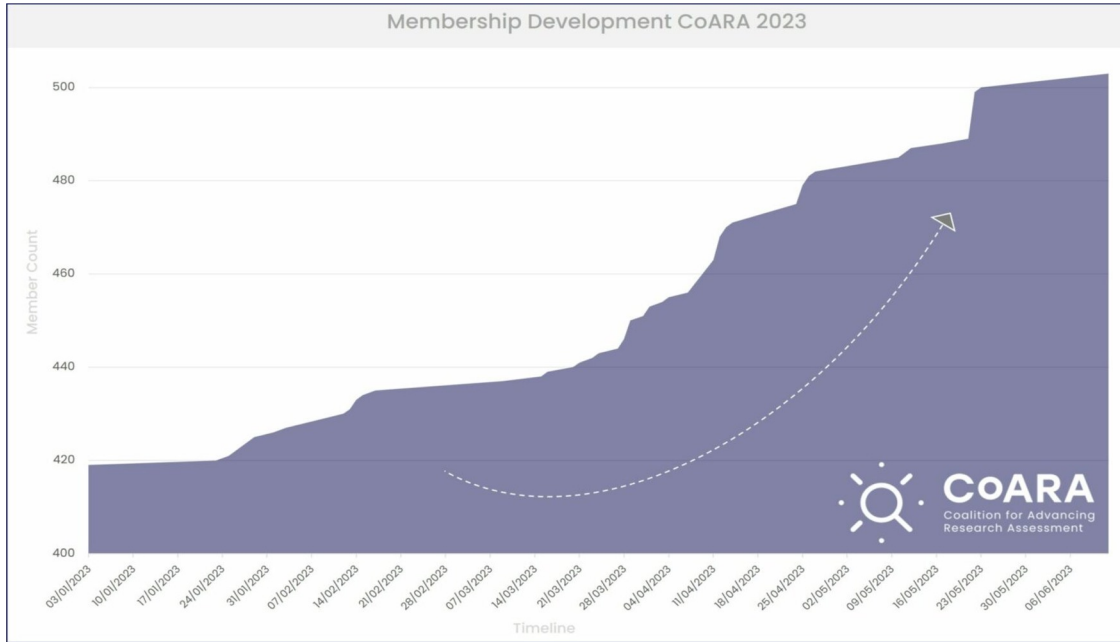
Slide: Steering Board CoARA

The Agreement's Four Core Commitments

- Two commitments to enable better recognition of the diverse practices and activities that maximise the quality of research.
- Two commitments to enable a move away from the inappropriate use of metrics.

1. Recognize the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research
2. Base research assessment primarily on qualitative evaluation for which peer review is central, supported by responsible use of quantitative indicators
3. Abandon inappropriate uses in research assessment of journal- and publication-based metrics, in particular inappropriate uses of Journal Impact Factor (JIF) and h-index
4. Avoid the use of rankings of research organizations in research assessment.

Slide: Steering Board CoARA

The Agreement's Core Principles

- **Openness** - to signatories of agreement, globally, accessible outputs
- **Responsibility** - general assembly responsible for rules and procedures of operation
- **Collaboration and mutual support** - supportive environment, mutual learning and collaboration, also with other initiatives
- **Inspiration** - inspire organizations inside and outside of the coalition
- **Commitment and autonomy** - supports implementation of commitments, respect autonomy
- **Voluntary and community-driven** - volunteer members, driving force
- **Dialogue** - in research and academic communities and beyond, representation
- **Inclusiveness** - global, different levels of progress
- **Trust** - self-assessment shared publicly
- **Funding** - voluntary in-kind, potential cash contributions from members
- **Non-profit** - no commercial activities, open and re-usable outputs

Slide: Steering Board CoARA

CoARA: Outlook and Activities

Membership Development CoARA 2023

Source: Coalition for Advancing Research Assessment 13/06/2023

and the counting continues...

500+

Member Organisations

There are about 600 CoARA member organizations from across the world (July 2023).

As of August 2023, the CoARA Steering Board announced that ten Working Groups and the first five National Chapters have been approved to start their activities as part of CoARA; they are open for more CoARA members to join.

DORA vs. CoARA - How They Differ

	DORA	**CoARA**
Impact	Global initiative	Primarily European research area (global opening aspired to)
Scope	Review of complete scientific work including content and quality	Focus on scientific publishing and its evaluation mechanisms
Frame	Set of recommendations	Implementing the reforms outlined in the Agreement
Organizational form	Declaration	Structured membership, working group and national chapter
Membership	Institutions, organizations and individuals	Institutions and organizations

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Let's keep in touch!

- Further information: https://os.helmholtz.de/

- Email: open-science@helmholtz.de

- Twitter: @helmholtz_os

- Website: https://os.helmholtz.de

- Mailingliste for employees of Helmholtz: Helmholtz Open Science Professionals

- Helmholtz Open Science Newsletter

- Mattermost Space for Open Science