# EOSC as an Enabler of Research Assessment Reform

Position Paper from Task Force on Research Careers, Recognition, and Credit

Authors:

Nilsonne, Gustav (ORCID 0000-0001-5273-0150)
O'Neill, Gareth (ORCID 0000-0002-0488-4371)
Dahle, Sebastian (ORCID 0000-0001-7568-0483)
Gaillard, Vinciane (ORCID 0000-0003-0423-1511)
Priess-Buchheit, Julia (ORCID 0000-0003-3029-9683)
Schmidt, Birgit (ORCID 0000-0001-8036-5859)
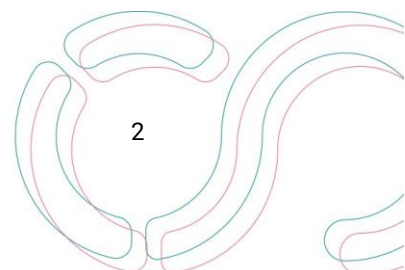Psomopoulos, Fotis (ORCID 0000-0002-0222-4273)
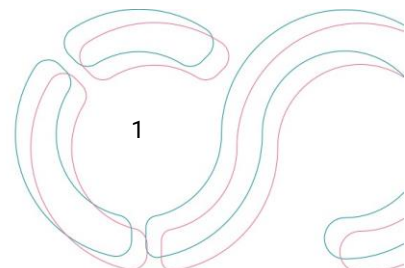
Table of contents

Abbreviations

CoARA   The Coalition for Advancing Research Assessment
DORA   The San Francisco Declaration on Research Assessment
EOSC   European Open Science Cloud
EOSC-A   European Open Science Cloud Association
FAIR   Findability, Accessibility, Interoperability, and Reusability
MAR   Multi-Annual Roadmap of the EOSC
SRIA   Strategic Research and Innovation Agenda
RFO   Research Funding Organisation
RPO   Research Performing Organisation
TF   Task Force
TF RCRC   Task Force on Research Careers, Recognition, and Credit
UNESCO   United Nations Educational, Scientific, and Cultural Organisation

EOSC Association AISBL

Rue du Luxembourg 3, BE-1000 Brussels, Belgium
+32 2 537 73 18 | info@eosc.eu | www.eosc.eu
Reg. number: 0755 723 931 | VAT number: BE0755 723 931

2

1. Introduction
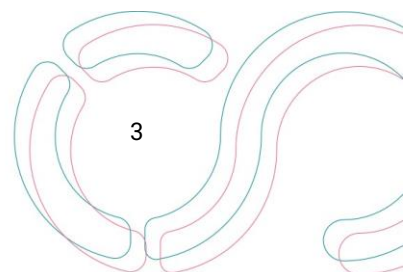
The vision of the European Open Science Cloud (EOSC) is to create a web of data adhering to the FAIR principles and services that enable researchers to practise Open Science. The Task Force (TF) on Research Careers, Recognition, and Credit (RCRC) under the EOSC Association (EOSC-A) was set up to address incentives and rewards for researchers to engage with EOSC and integrate Open Science and FAIR principles into academic recruitment and employment as well as grant assessment procedures. This Task Force (TF) is one of 13 TFs of EOSC-A that were initiated with the purpose of liaising with EOSC projects to offer feedback on developments, as well as identify strategic gaps and areas for investment as input to the EOSC Partnership's Strategic Research and Innovation Agenda (SRIA).

This position paper presents recommendations from the TF RCRC on reforming research assessment to support researchers engaging with EOSC. The recommendations are aimed at the EOSC Partnership and EOSC-A (including the members of EOSC-A) to strategically contribute to the reform of research assessment with respect to EOSC and Open Science.

2. Background

There have been many calls for a reform of research assessment over the last decade. The San Francisco Declaration on Research Assessment (DORA) proposed 18 recommendations to stop using journal-based metrics, such as the journal impact factor, in hiring, promotion, and funding decisions and to support the adoption of better practices in research assessment. The Leiden Manifesto for Research Metrics similarly proposed ten principles to combat the misuse of bibliometrics and offer best practices in metrics-based research assessment to guide institutions in measuring research performance and impact. The Hong Kong Principles is another noteworthy example. It proposed five principles to recognise and reward researchers for behaviours that strengthen research integrity and responsible research practices in academic hiring, promotion, and funding decisions.

Two recent developments have further placed research assessment reform at the centre of European research and innovation policy. First, the Coalition for Advancing Research Assessment (CoARA) is a global coalition of research-performing (RPO) and research-funding (RFO) organisations, national and regional assessment authorities and agencies, researcher organisations, and learned societies. Coalition members adhere to the Agreement on Reforming Research Assessment, which includes four core and 6 supporting commitments for organisations to reform their research assessment systems. Second, the Proposal for a Council Recommendation on a European Framework to Attract and Retain Research, Innovation, and Entrepreneurial Talents in Europe (2023) by the European Commission proposes eight pillars to improve the careers of researchers and support the attraction, mobility, and retention of researchers in Europe. One of the pillars focuses on skills, with a recommendation for interoperable careers in all relevant sectors and for the practice of Open Science, referring to the European Competence Framework for Researchers (ResearchComp). The proposal provides further recommendations across the pillars as well as a revised European Charter for Researchers on research assessment.

EOSC Association AISBL

Rue du Luxembourg 3, BE-1000 Brussels, Belgium
+32 2 537 73 18 | info@eosc.eu | www.eosc.eu
Reg. number: 0755 723 931 | VAT number: BE0755 723 931

3

One of the main aims of EOSC is to improve the openness and transparency of research by facilitating a change to an open ecosystem where publications, data, software, and other digital research outputs are shared as openly as possible. EOSC encompasses technical systems to create a web of FAIR data and services. This vision, however, will only be realised if researchers - as key users of EOSC feeding the ecosystem with data and exploiting the data - are incentivised and rewarded for adopting open and FAIR principles and practices.

This TF was initiated under the EOSC-A in order to support the implementation of EOSC and the development of the [EOSC Partnership](#) [SRIA](#). EOSC-A plays a key role in supporting the development and implementation of EOSC and Open Science as a member of the [EOSC Tripartite Governance](#), as a signatory of the [EOSC Partnership](#) (which realises funding calls for EOSC in Horizon Europe), and via its 250+ members (of mostly RPOs and RFOs). EOSC-A also plays an influential role in reforming research assessment as a member of CoARA and with member RPOs and RFOs which are implementing research assessment and are, in some cases, members of CoARA.

3. Recommendations

The TF recognises that research assessment systems are focused too narrowly on a publish-or-perish mentality, are overly dependent on proxy measures to assess the quality and impact of research, do not sufficiently recognise or reward the full range of research outputs, such as scientific publications, data, software, models, methods, theories, algorithms, protocols, workflows, exhibitions, strategies, policy contributions, etc., do not sufficiently recognise or reward Open Science principles and practices, and include biases which adversely affect some researchers (such as early-career researchers, women, and minorities). The TF takes the view that research assessment should take into account the full spectrum of activities and outputs by researchers, consider differences between disciplines, recognise and reward as well as support Open Science and FAIR practices, combine a quantitative and qualitative approach to assessment, support responsible use of indicators and metrics for assessment, and allow flexibility for organisations to tailor assessment to their own interests and needs.

Against this backdrop, we make recommendations on two levels: to the EOSC Partnership and the EOSC Association.

The TF recommends that the EOSC Partnership should:

1. Prioritise responsible research assessment in future updates of the SRIA and raise awareness on how EOSC can support research assessment and can include Open Science practices

2. Support the development of open infrastructure for research assessment, including FAIR and open documentation of research assessment policies and practices

3. Implement concrete funding actions which support the reform of research assessment and complement the activities of CoARA and its members, including:

   • Research on research assessment systems to build a sound evidence base

   • Piloting of new research assessment systems, which include Open Science
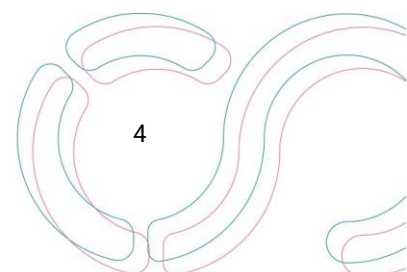
- Piloting responsible use of indicators/metrics which include Open Science, such as those developed by GraspOS and OPUS and/or planned to be implemented under other EOSC-funded projects.

- Development of digital tools to support new research assessment systems

- Adaptation of existing digital tools to support the use of EOSC federated services in research assessment

The TF recommends that EOSC-A should:

4. Continue to define the role of EOSC-A in the reform of research assessment

5. Reflect on how to engage with CoARA and actively participate in relevant working groups and national chapters, as well as coordinate and align across CoARA members in EOSC-A in order to propose a role for EOSC-A in the reform of research assessment.

6. Monitor the activities of EOSC-A members on reforming research assessment and monitor the impact of any reforms involving FAIR data and open science on research assessment and researchers

7. Share data, experiences, and good practices from EOSC-A members on processes, challenges, and outcomes to reform research assessment

8. Facilitate dialogue and collaboration between researchers, organisations, and policymakers on reforming research assessment with a focus on key topics, including:

    - Recognition and reward of the diversity of researcher activities and outputs

    - Recognition and reward of Open Science in research assessment systems

    - Responsible use of qualitative and quantitative approaches to assessment

    - Responsible use of indicators and metrics in research assessment systems

    - Recognition of biases which adversely affect vulnerable researcher groups

    - Support to make the assessment process easier and clearer for researchers

    - Alignment of digital researcher profiles with usable and sustainable persistent identifiers

4. Conclusions

We, at this moment, provide eight recommendations for the EOSC Partnership and EOSC-A on supporting the reform in research assessment, focusing on the further developments of EOSC and Open Science. The reform of research assessment should not only consider the principles and practices of Open Science but also be supported where applicable by the vision of EOSC. As the "single voice for advocacy and representation for the broader EOSC stakeholder community", EOSC-A can play a key role as a member of the EOSC Partnership, a member of CoARA, and through its members who are implementing research assessment and are member of CoARA. These

EOSC Association AISBL

Rue du Luxembourg 3, BE-1000 Brussels, Belgium
+32 2 537 73 18 | info@eosc.eu | www.eosc.eu
Reg. number: 0755 723 931 | VAT number: BE0755 723 931

5

recommendations outline a path for EOSC-A to be a key enabler of research assessment reform in the future.