







Policies to Make Science Fit for the Twenty-First Century
There is value and risk of being a first mover, but there is higher risk of being a follower.



- CAMBIA IL MODO DI FARE RICERCA
  - PIÙ DATI
- LE PUBBLICAZIONI NON SONO L'UNICO «RISULTATO»
  - PIÙ COLLABORAZIONE
- MAGGIORE NECESSITÀ DI RICERCHE INTERDISCIPLINARI
  - ISTANZE DI RIPRODUCIBILITÀ E RIUSO

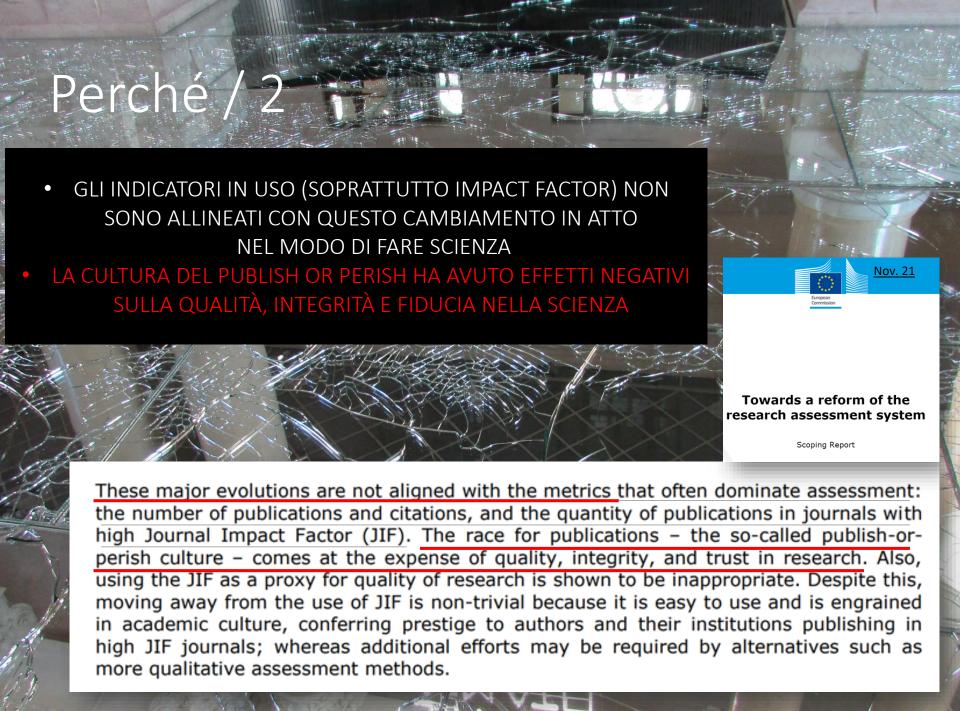


Nov. 21

Towards a reform of the research assessment system

Scoping Report

The research and innovation process is undergoing major evolutions, largely due to the digitalisation of the research and discovery process: the diversity of research tasks and required skills has increased, the volume of previous findings and datasets is often staggering, and desired outputs are no longer restricted to scholarly publications; sharing knowledge and tools, and openness to contributions from other stakeholders in the system (open collaboration) have become essential to efficiency and impact; and there is a growing need of multi-, inter-, and trans-disciplinary approaches and collaboration to tackle ever more complex scientific questions and societal challenges in collaboration with societal stakeholders. There is also a continuous need to make research outputs accessible and re-usable by other researchers and the whole of society and to ensure sound methodologies that increase the reliability and reproducibility (where applicable) of research outputs.



### [Houston, abbiar

NEJM

Science

**CORRELAZIONE DIRETTA** 

#RETRACTIONS/IMPACT FACTOR

J Exp Med

**Retraction Index** 

J Immunol

Lancet

EMBO J

**Nature** 

### The Retraction Wa Leaderboard

https://retractionwatch.com/

### Retraction Watch

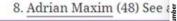
Tracking retractions as a window into the scientific process

Who has the most retractions? Here's our unofficial list (see notes on methodology), which we'll update as more information comes to light:

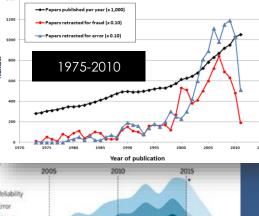
- 1. Yoshitaka Fujii (total retractions: 183) See also: Final report of investigating committee, our reporting, additional coverage
- 2. Joachim Boldt (136) See also: Editors-in-chief statement, our coverage
- 3. Yoshihiro Sato (102) See also: our coverage
- 4. Jun Iwamoto (78) See also: our coverage



- 6. Diederik Stapel (58) See
- 7. Yuhji Saitoh (53) See als



Science



Retractions as a function of total publications

RITRATTAZIONI PER FRODE

43%

Science 26 Oct 2018: Vol. 362, Issue 6413, pp. 390-393

All retractions: 62 All retractions: 419 Fraud: 29

J.Brainard, Rethinking retractions, Science 2018

All retractions: 946 Fraud: 411

ROYAL SOCIETY OPEN SCIENCE

Fang, Casadevall 2011

20-

rsos.royalsocietypublishing.org

The natural selection of bad science

... perché valutazione = ossessione

#### Lincei 2021, Illetterati 1.43'

Agli scienziati non basta più pubblicare i propri lavori. È imperativo che il lavoro pubblicato sia collocato in uno scaffale editoriale che gli conferisca prestigio e influenza. Questa tensione per l' impatto di quanto si pubblica colloca gli articoli scientifici al centro di una rete di metriche che guardano tipicamente a dove si pubblica e a quante volte il lavoro viene citato. Ottenere un buon punteggio attraverso l' applicazione di queste metriche diventa un obiettivo che gli scienziati e gli editori sono disposti a raggiungere barando.

L'esperienza della valutazione della ricerca in Italia: un primo bilancio" - sessione mattutina

ROYAL

Scott Edmunds perhaps summed it up best at the FORCE2015 meeting in Oxford:



It is no longer the case that people are gaming the system, the system has become a game. It's time to say Game Over.



If we cast ourselves as mere victims we'll never change the rules. The whole narrative is an excuse for doing nothing.

2015

**GAMING** 

Misconduct and Manipulation in Academic Research

Biagioli, 2019

EDITED BY Mario Biagioli AND Alexandra Lippman

### LA VALUTAZIONE È DIVENTATA UN'OSSESSIONE

- «not only are we failing to provide the right incentives, we are providing perverse ones»
- Goodhart's law: «when a measure becomes a target, it ceases to be a good measure»
- «people game the system at every level»

## ... la valutazione è il problema

### VALUTAZIONE CON I CRITERI ATTUALI

- PRODUCE COMPORTAMENTI ADATTIVI
- PROMUOVE LA COMPETIZIONE INVECE DELLA COLLABORAZIONE
- MANTIENE IL SISTEMA INEFFICACE DELLE RIVISTE «PRESTIGIOSE»
  PAGATE A CARO PREZZO
  - IMPEDISCE DI RICONOSCERE «PEZZI» DI RICERCA QUALI DATI, CODICE, BLOGS...

### International Science Council

metrics designed to assess the importance and impact of research as an aid to evaluation, with publication outputs in traditional scientific journals being the major focus. These metrics in turn affect the behaviour of researchers, such as their choice of journals, as they seek to maximize their performance as measured by the metrics used. They can contribute to the maintenance of high journal prices, promote intense competition rather than openness and sharing, and fail to recognize research contributions such as the production of datasets, software, code, blogs, wikis and forums.

# ...cosa ci ha insegnato il COVI

I DATI APERTI SALVANO VITE The State of Open Data 2021

The longest-running longitudinal survey and analysis on open data

Foreword by Natasha Simons, Australian Research Data Commons (ARDC)

Nov. 29 2021

Open data saves lives. The glob beyond anything that came before it to in solving the big challenges of our time SERVONO I DATI [FAIR BY DESIGN] (E NON SOLO LA SINTESI FINALE SOTTO FORMA DI ARTICOLO)



2020

Congratulations to the authors but I am not strong enough for this

Mostra questa discussione

Home + #SDG3 + Open Science è una necessità, non una nola burocra

Open Science à una necessit

Open Science è una necessità, non una noia burocratica

IL COVID HA DIMOSTRATO CHE OPEN SCIENCE È UNA NECESSITÀ tps://doi.org/10.1038/s41586-023

Sanjee Baksh, PhD @S\_Baksh · 21h

ceived 25 June 2019

cepted: 4 June 2021

blished online: 20 April 2022

...GLI ARTICOLI SERVONO
SUBITO: PREPRINT!
CON IL SISTEMA TRADIZIONALE

AVREMMO VISTO I PRIMI

ARTICOLI (SENZA DATI) SE VA

BENE A DICEMBRE 2020

(9-18 MESI TEMPI MEDI DI PUBBLICAZIONE)



#### #OSEC2022 @BoukacemZeg

(applauded by @stephen\_curry) concludes her talk with a quote from a young research who left science saying "GAME OVER: The pandemic is a life-size experiment that reminded us that the ultimate goal is to advance knowledge, not egos, not numbers"

Traduci il Tweet

Feb. 4 2022

LA PANDEMIA CI RICORDA CHE LO SCOPO DELLA RICERCA È FARE AVANZARE LA CONOSCENZA, NON SONO I NUMERI O IL NOSTRO EGO [I AM NOT MY H INDEX]



SE ABBIAMO CREATO UNA GENERAZIONE DI RICERCATORI CHE PENSANO SOLO ALLA GLORIA DI UN ARTICOLO IN RIVISTE PRESTIGIOSE E NON A FARE BUONA RICERCA CHE CAMBI IL MONDO, SIAMO NEI GUAI

The virus is reminding us that the purpose of scholarly communication is not to allocate credit for career advancement, and neither is it to keep publishers afloat. Scholarly communication is about, well, scholars communicating with each other, to share insights for the benefit of humanity. And whilst we've heard all this before, in a time of crisis we realise afresh that this isn't just rhetoric, this is reality.

WONKHE ABOUT US- EVENTS LATER JOBS SUBSCRIPTION SUS-Y

The purpose of publications in a pandemic and beyond

the coffin will be closed?!" If we've created a generation of scholars who are just in it for the glory of papers in glamorous journals, and not to do good research that changes the world a little bit, then we really are in trouble.

#### IL SISTEMA ATTUALE

- NON RICONOSCE DIVERSITÀ DI CONTRIBUTI
  - VA A SCAPITO DELLA QUALITÀ
  - INCORAGGIA RIVISTE PREDATORIE
- INCORAGGIA PAGAMENTO IN RIVISTE IN ABBONAMENTO [REMINDER: LA RICERCA È PAGATA CON FONDI PUBBLICI] INVECE DI RIVISTE OPEN SOLO PERCHÉ HANNO ALTO IMPACT FACTOR
  - SCORAGGIA RICERCHE «RISCHIOSE»
- FA PERDERE TEMPO E DENARO PERCHÉ NON SI PUBBLICANO RISULTATI NEGATIVI

## Perché / 3



Assessment processes relying predominantly on journal- and publication-based metrics are known to result in a 'publish or perish' culture that falls short of recognising diverse approaches and could come at the expense of quality – The dominance of narrow journal- and publication-based metrics, which are often used inappropriately in research assessment, can be a hurdle to the recognition of diverse contributions and may negatively affect the quality and impact of research. For example, this dominance can: promote quantity and speed at the expense of quality and rigour; lead to the emergence of predatory journals and conferences; encourage publishing in paywalled journals because of their high impact factors, despite the availability of open access alternatives; lead to risk-aversity because taking risks may reduce the chances of publication; generate excessive attention to rankings that hinders collaboration; and waste efforts, time and resources through the duplication of work as 'negative' findings go largely unreported. Research assessment

Researchers are not 'hoodwinked' victims. All choose to play the publishing game and some can choose to change it.

iche

la

icienza editoria scientifica Open Access Open science Valutazione

Riviste predatorie: una questione di ecologia

Ilaria Fava, Paola Galimberti e Maria Chiara Pievatolo - 4 Ottobre 2021

Le riviste predatorie sono spesso definite come il lato oscuro dell'open access. Una sorta di effetto collaterale indesiderato di un movimento che in sé sarebbe virtuoso. L'analisi spesso si ferma qui e pochi collegano direttamente il fenomeno dell'editoria predatoria ai sistemi di valutazione performance based, che premiano e promuovono sulla base di indicatori quantitativi il cui soddisfacimento finisce per diventare lo scopo dei giovani ricercatori (When a measure becomes a target...).

Recentemente si è affermato che la soluzione al fenomeno potrebbe essere rappresentata dall'acquisizione di black lists da

editori commerc sarebbero e son formazione dei r

SOTTOPRODOTTO DI

QUESTA VALUTAZIONE

QUANTITATIVA, NON

DELL'OPEN ACCESS

Secondo questa prospettiva sarebbe l'open access la causa del proliferare delle riviste predatorie; i nostri esperti si sono appunto interrogati su che cosa si può fare per contrastare questo fenomeno, e in particolare come devono agire i ricercatori per evitare di esserne catturati.

Una simile impostazione affronta il problema a valle e non a monte, perché identifica il sintomo ma senza interrogarsi sulla causa con sufficiente radicalità. Se infatti si tratta di pubblicare a pagamento per interessi diversi da quello della partecipazione al dibattito scientifico, che la pubblicazione sia ad accesso aperto o chiuso dovrebbe essere teoricamente irrilevante.

Perché mai un ricercatore dovrebbe scegliere di pubblicare in una rivista predatoria, eventualmente ad accesso aperto? Certamente perché queste riviste garantiscono una pubblicazione rapida, cioè una riga in più nel proprio CV. Ma perché la riga in più nel CV è così importante? Perché al ricercatore è richiesto di soddisfare alcuni criteri numerici per poter aspirare ad una posizione da strutturato.

Visto da questa prospettiva allora la radice del fenomeno delle riviste predatorie è un sistema di valutazione che pone l'enfasi sulla quantità (di pubblicazioni e di citazioni). L'open access è un aspetto soltanto accidentale. Anche a riviste ad accesso chiuso capita di ospitare articoli privi di sostanza, talvolta neppure scritti da esseri umani. Si veda per esempio Cabanac, Guillaume, Cyril Labbé, e Alexander Magazinov. «Tortured phrases: A dubious writing style emerging in science. Evidence of critical issues affecting established journals». 12 luglio 2021. http://arxiv.org/abs/2107.06751.



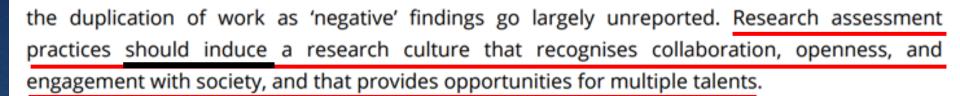


### Come / 1

### Coalition for Advancing Research Assessment



The Agreement full text



# [non dimentichiamo: riforma della valutazione + Open Science!]



### e c'è EOSC1

cosc
 eosc
 eos

EOSC STRATEGIC AGENDA + ADVISORY GRO

**EOSC** association

# Advancing Open Science in Europe

What is the EOSC Association?

- AMBIENTE VIRTUALE PER IN CUI SI INCONTRA CHI CREA DATI, CHI PRODUCE SERVIZI, CHI FA INNOVAZIONE, CITTADINI
- SI BASA SU DATI FAIR (FINDABLE, ACCESSIBLE, INTEROPERABLE, REUSABLE)

SRIA

### European Open Science Cloud Objectives Tree

National, European and global infrastructures do not share Open Public & private sectors do not Researchers do not combine and **PROBLEMS** exploit Open Science for improving build upon ever-growing available quality and productivity of research scientific results Science standards and practices INFRASTRUCTURES PEOPLE DATA Absence of incentives, rewards and The scientific landscape consists of Scientific results are unfindable. BARRIERS national and disciplinary research skills for open sharing stifles the inaccessible, not interoperable, and uptake of Open Science silos and infrastructures often used only once OPEN FAIR FEDERATION **OPEN SCIENCE** Sustainable and federated Open Science practices and skills Standards, tools and services allow **COME «NUOVA** infrastructures enable open sharing are rewarded and taught, becoming researchers to find, access, of scientific results the 'new normal' reuse and combine results **NORMA»** INDUSTRY SCIENCE SOCIETY Improved impact of Improved trust, quality Development of BENEFITS and productivity in research in addressing innovative services and societal challenges science products

# ...Houston, abbiamo un problema



LA PERCEZIONE IN ITALIA:

-OPEN SCIENCE=OPEN ACCESS

- SOLO RIVISTE

- SI PAGA SEMPRE PER PUBBLICARE
  - EDITORI PREDATORI

# ...ecco perché è nata COARA



https://coara.eu/

# Coalition for Advancing Research Assessment

Our vision is that the assessment of research, researchers and research organisations recognises the diverse outputs, practices and activities that maximise 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.

REPowerFL

# COARA, il processo

Nov. 2021 Scoping report

Towards a reform of the research assessment system

Scoping Report

Luglio 2022 Testo dell'accordo

The Agreement full text

Settembre 2022 lancio di COARA

Coalition for Advancing Research
Assessment

2021

2022 gen.

2022 luglio

2022 sett.

COARA

2022 dic.

SURVEY/ INCONTRI BILATERALI SCRITTURA COLLABORATIVA
DEL TESTO DELL'ACCORDO

SCIENCE **EUROPE** EC = facilitator Drafting team EUROPEAN UNIVERSITY Closely contribute to the « Core group » MS representatives iterative & Potential coalition (ERAC & ERA Forum) review members comments

ELETTO STEERING BOARD 2 DIC.



- 12/02/2022

Coalition for Advancing Research Assessment (CoARA) launched, Steering Board elected

## [ma c'erano delle basi]

RIFORMA DELLA
VALUTAZIONE
(COUNCIL CONCLUSIONS
ON THE FUTURE
GOVERNANCE OF THE ERA
– COM 14308/21)

14308/2

Dec. 2021

RECH 538 COMPET 865

#### **OUTCOME OF PROCEEDINGS**

From: General Secretariat of the Council

On: 26 November 2021
To: Delegations

No. prev. doc.: 14126/21

ect: Future governance of the European Research Area (ERA)

- Council conclusions (adopted on 26/11/2021)

LA VALUTAZIONE DEVE CAMBIARE (RACCOMANDAZIONI 790/2018)



OPEAN

Brussels, 25.4.2018 C(2018) 2375 final

2018

COMMISSION RECOMMENDATION

of 25.4.2018

on access to and preservation of scientific information



Council of the European Union

June 2022

Brussels, 10 June 2022 (OR. en)

10126/22

RECH 371 TELECOM 267 COMPET 491 IND 227 MI 468 EDUC 245

#### **OUTCOME OF PROCEEDINGS**

From: General Secretariat of the Council
On: 10 June 2022
To: Delegations

No. prev. doc.: 9515/22

Subject: Research assessment and implementation of Open Science
- Council conclusions (adopted on 10 June 2022)

CONCLUSIONI DEL CONSIGLIO SULLA VALUTAZIONE (10126/2022 JUNE)



[le basi]

### CONCLUSIONI DEL CONSIGLIO SULLA **VALUTAZIONE**

ACKNOWLEDGES that in order to accelerate the implementation and the impact of Open Science policies and practices across Europe, action has to be taken to move towards a renewed approach to research assessment, including incentive and reward schemes, to put in place a European approach in accordance with the Pact for Research and Innovation in Europe, and strengthen capacities for academic publishing and scholarly communication of all research outputs, and encourage where appropriate, the use of multilingualism for the purpose of wider communication of European research results;



Brussels, 10 June 2022 (OR. en)

10126/22

**RECH 371 TELECOM 267** COMPET 491 **IND 227 EDUC 245** 

#### OUTCOME OF PROCEEDINGS

General Secretariat of the Council

10 June 2022

Delegations 9515/22

Research assessment and implementation of Open Science

Council conclusions (adopted on 10 June 2022)





RICONOSCE I DANNI **DELL'ATTUALE** SISTEMA SULLA QUALITÀ E INTEGRITÀ **DELLA RICERCA** 

ACKNOWLEDGES that research assessment systems should focus on quality and impact, and RECALLS that the current research assessment systems are nowadays to a great extent too focused on the use of some quantitative journal- and publication-based indicators and the evaluation of a narrow range of research outputs; CONSIDERS that such an approach may lead to negative biases in terms of research quality, reproducibility and integrity; STRESSES that research assessment should include other research outcomes and processes and promote early knowledge sharing and collaboration to accelerate the implementation of Open Science policies and practices;

# verso una nuova ERA Policy Agenda

Research Area Policy Agenda

LE PRIME TRE AZIONI DELLA NUOVA EUROPEA RESEARCH AREA (ERA) RIGUARDANO OPEN SCIE Overview of actions for the period 2022-2024

Brussels, 26 November 2021

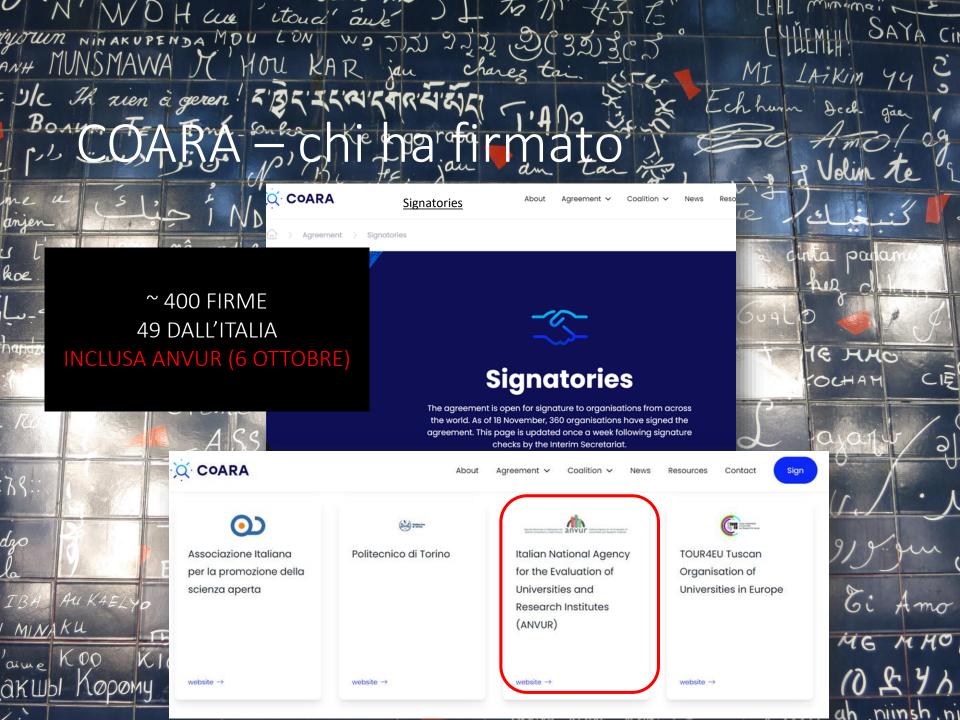
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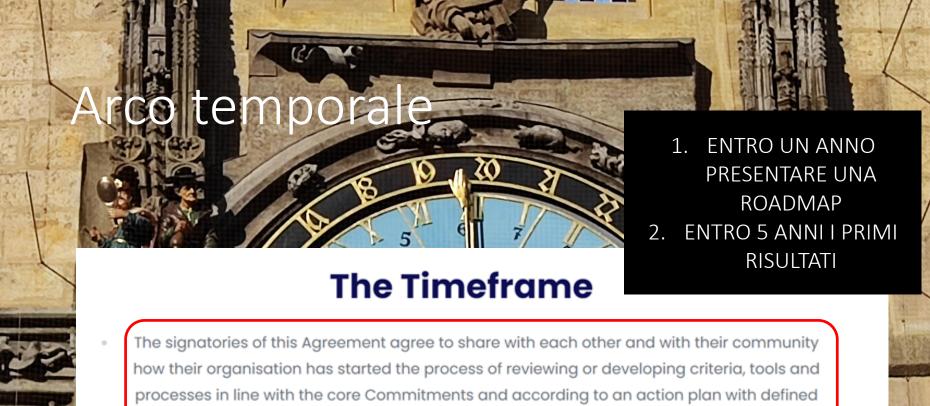
RECH 538

From:	General Secretariat of the Council					
On:	26 November 2021					
To:	Delegations	Dec. 2021				
No. prev. doc.:	14126/21					
Subject:	Future governance of the European Research Area (ERA					

### Priority Area: Deepening a truly functioning internal market for knowledge

ERA Actions	Outcomes				
1. Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the European Open Science Cloud (EOSC)	Deploy Open Science principles and identify Open Science best practices     Deploy the core components and services of EOSC and federate existing data infrastructures in Europe, working towards the interoperability of research data     Establish a monitoring mechanism to collect data and benchmark investments, policies, digital research outputs, open science skills and infrastructure capacities related to EOSC				
2. Propose a EU copyright and data legislative and regulatory framework fit for research	Identify barriers and challenges to access and reuse of publicly funded R&I results and of publications and data for scientific purposes, and identify potential impacts on research, through an analysis of relevant provisions under EU copyright and data legislation and related regulatory frameworks, and of relevant institutional and national initiatives     Propose legislative and non-legislative measures to improve the current EU copyright and data legislative and regulatory frameworks				
3. Advance towards the reform of the Assessment System for research, researchers and institutions to improve their quality, performance and impact	Analysis of legal and administrative barriers at national and trans-national level for a modern research assessment system     Create a coalition of European research funders and research performers who agree on a new approach for research assessment, following wide and inclusive consultations at European and international level     Implementation plan of the coalition to roll-out the new approach, including pilots in different domains				



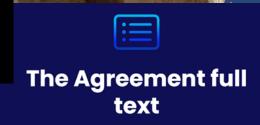


- milestones, by the end of 2023 or within one year of signing the Agreement.
  - Signatories of this Agreement agree to regularly demonstrate progress towards reviewing, developing and evaluating criteria, tools and processes that fulfil the core Commitments, with a touch point **at end of 2027 or within five years of signing the Agreement**, by which time they will have worked through at least one cycle of review and development of their assessment criteria, tools and processes.

Signatories that are not assessing research projects, researchers, research units or research performing organisations commit to contribute to the reform and share progress with each other and the community respecting the same timeframe.

# I pilastri / 1

- ASSICURARE PRINCIPI ETICI E DI INTEGRITÀ DELLA RICERCA
- SALVAGUARDARE LA LIBERTÀ DELLA RICERCA SCIENTIFICA



### Base our actions on the following Principles:

### Principles for overarching conditions

- Comply with ethics and integrity rules and practices, and ensure that ethics and integrity are
  the highest priority, never compromised by any counter-incentives. Verify before or during
  assessment that the highest standards of general and research- specific ethics and integrity
  are met. Value methodological rigour to guard against sources of bias, and promote extended
  forms of professional and scientific integrity, showing adherence to moral standards of
  conduct, and include behaviours such as early sharing of research data and results, building
  on the work of others, and subjecting oneself to critical external validation.
- Safeguard freedom of scientific research. By putting in place assessment frameworks that do
  not limit researchers in the questions they ask, in their research implementation, methods or
  theories. By limiting the assessment frameworks to only those necessary, as assessment must
  be useful for researchers, institutions and funders.

  Agreement



- RISPETTARE L'AUTONOMIA DEGLI ENTI DI RICERCA
- ASSICURARE LA TRASPARENZA DEI DATI E DEI CRITERI



### The Agreement full text

- Respect the autonomy of research organisations. By safeguarding the independence of research performing organisations in the evaluation of their researchers while implementing the present principles, yet striving to prevent contradictions between the assessment of research, researchers and institutions, and between institutions, to avoid fragmentation of the research and innovation landscape and to enable the mobility of researchers.
- Ensure independence and transparency of the data, infrastructure and criteria necessary for research assessment and for determining research impacts; in particular by clear and transparent data collection, algorithms and indicators, by ensuring control and ownership by the research community over critical infrastructures and tools, and by allowing those assessed to have access to the data, analyses and criteria used.
  Agreement

# I principi / 1

- FOCUS SULLA QUALITÀ
- QUALITÀ COMPORTA TRASPARENZA E RIPDORDUCIBILITÀ
  - ...QUINDI HA UN FORTE LEGAME CON OPEN SCIENCE, CONDIVISIONE, CO-CREAZIONE
    - IMPATTO REALE SULLA SOCIETÀ



The Agreement full text

### Principles for assessment criteria and processes

#### Quality and impact

**Agreement** 

- Focus research assessment criteria on quality. Reward the originality of ideas, the professional research conduct, and results beyond the state-of-the-art. Reward a variety of research missions, ranging from basic and frontier research to applied research. Quality implies that research is carried out through transparent research processes and methodologies and through research management allowing systematic re-use of previous results. Openness of research, and results that are verifiable and reproducible where applicable, strongly contribute to quality. Openness corresponds to early knowledge and data sharing, as well as open collaboration including societal engagement where appropriate. Assessment should rely on qualitative judgement for which peer review is central, supported by responsibly used quantitative indicators where appropriate.
- Recognise the contributions that advance knowledge and the (potential) impact of research
  results. Impact of research results implies effects of a scientific, technological, economic
  and/or societal nature that may develop in the short, medium or long-term, and that vary

# I principi / 2

- RICONOSCERE LE DIVERSE PRATICHE E I DIVERSI RISULTATI
  - PREMIARE LA CONDIVISIONE E COLLABORAZIONE
  - CONSIDERARE TUTTE LE ATTIVITÀ (PEER REVIEW, MENTORSHIP, LEADERSHIP...)
  - CONSIDERARE TUTTO L'INSIEME DEI RISULTATI DELLA RICERCA (NON SOLO LE PUBBLICAZIONI)
  - RICONOSCERE LAVORO IN TEAM E COLLABORAZIONI



The Agreement full text

Diversity, inclusiveness and collaboration

**Agreement** 

• Recognise the diversity of research activities and practices, with a diversity of outputs, and reward early sharing and open collaboration. Consider tasks like peer review, training, mentoring and supervision of Ph.D candidates, leadership roles, and, as appropriate, science communication and interaction with society, entrepreneurship, knowledge valorisation, and industry-academia cooperation. Consider also the full range of research outputs, such as scientific publications, data, software, models, methods, theories, algorithms, protocols, workflows, exhibitions, strategies, policy contributions, etc., and reward research behaviour underpinning open science practices such as early knowledge and data sharing as well as open collaboration within science and collaboration with societal actors where appropriate. Recognise that researchers should not excel in all types of tasks and provide for a framework that allows researchers to contribute to the definition of their research goals and aspirations.

# I principi / 3

- RISPETTARE DIVERSITÀ DI DISCIPLINE
  - RISPETTARE DIVERSITÀ DI RUOLI
- RICONOSCERE RICERCHE INTERDISCIPLINARI
  - VALUTARE LE COMPETENZE OPEN
- RICONOSCERE LAVORO IN TEAM E COLLABORAZIONI

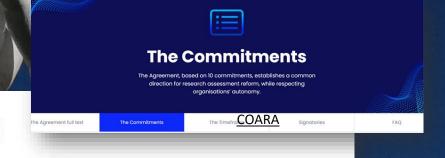


### The Agreement full text

- Use assessment criteria and processes that respect the variety of scientific disciplines, research types (e.g. basic and frontier research vs. applied research), as well as research career stages (e.g. early career researchers vs. senior researchers), and that acknowledge multi-, inter-, and trans-disciplinary as well as inter-sectoral approaches, when applicable. Research assessment should be conducted commensurately to the specific nature of scientific disciplines, research missions or other scientific endeavours.
- Acknowledge and valorise the diversity in research roles and careers, including roles outside
  academia. Value the skills (including open science skills), competences and merits of individual
  researchers, but also recognise team science and collaboration.
- Ensure gender equality, equal opportunities and inclusiveness. Consider gender balance, the
  gender dimension, and take into account diversity in the broader sense (e.g. racial or ethnic
  origin, sexual orientation, socio-economic, disability) in research teams at all levels, and in the
  content of research and innovation.

  Agreement

# Gli impegni della Coalizione / 1



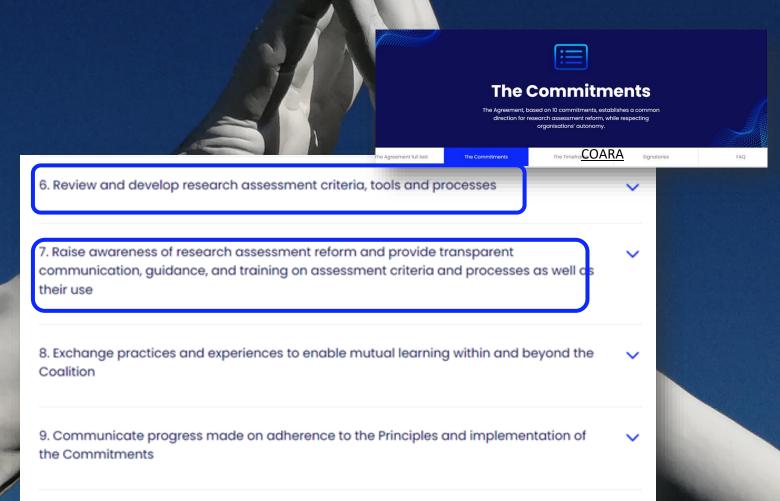
### The Commitments

- Recognise 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
- 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 organisations in research assessment
- Commit resources to reforming research assessment as is needed to achieve the organisational changes committed to

# Gli impegni della Coalizione / 2

10. Evaluate practices, criteria and tools based on solid evidence and the state-of-the-art in research on research, and make data openly available for evidence gathering and

research



### Come arriva



The Agreement full text

- COINVOLGERE CHI VIENE VALUTATO
- CONFRONTARSI, COLLABORARE

# Annex 3 – Reform journey: a suggested process for achieving the Commitments Agreement

- 1 **Allocate resources**, whether in terms of capacity or budget, to actively engage in the reform journey
- 2 Communicate your intention to reform, explain how you have started the process of reviewing or developing criteria, tools and processes in line with the core commitments
- 3 **Evaluate current assessment practices** in terms of alignment with the Principles and Commitments, consider also what currently works well and how this can be retained in parallel to any new practice *Re-evaluate at fixed intervals, whenever broad reforms to*
- 4 Engage those being assessed in the development and design of assessment criteria and processes, work with researchers to enable consideration of differences between disciplines and career levels
- Develop existing and design new assessment criteria, tools, and processes with assessors and those that are assessed; consider the diversity of contributions including: diverse outputs beyond journal publications and in different languages; diverse practices including those that contribute to robustness, openness, transparency, and inclusiveness of research and the research process including peer review, teamwork and collaboration; and diverse activities including teaching, leadership, supervision, training, and mentoring, according to the nature of each research discipline
- 6 Interrogate developed and new approaches by working with assessors and those that are assessed (e.g. who might new approaches discriminate against; how might they be gamed; what are the potential unintended consequences)
- 7 Implement developed and new assessment criteria, tools, and processes according to the Principles and Commitments; consider awareness raising, rewards, policies, training, infrastructure, and capacity building and include data collection to support monitoring, evaluation and mutual learning
- 8 Evaluate developed and new assessment criteria, tools, and processes
- 9 Share data / information, participate in mutual learning within and beyond the Coalition, supported by mechanisms developed by the Coalition
- 10 Coordinate with other organisations at national and international level, and promote international coordination and harmonisation
- 11 Continue to evolve assessment criteria, tools, and processes based on learning from own evaluations and those of others



# Perché è importante esserci / 2



Finally, in **part A of their proposals**, proposers are asked to list up to five relevant publications, widely used datasets or other achievements of consortium members that they consider significant for the action proposed. Open access is expected for publications, in particular journal articles, while datasets are expected to be FAIR and 'as open as possible, as closed as necessary'. If publications are not open access, proposers are strongly encouraged to deposit them retroactively in repositories and provide open access to them when possible. The significance of publications will not be evaluated on the basis of the Journal Impact Factor of the venue they are published in, but on the basis of a qualitative assessment provided by the proposers for each publication.

HORIZON EUROPE NON
CONSIDERA
IMPACT FACTOR

...PER I FONDI EUROPEI AVETE GIÀ ALTRI CRITERI

ERC HA ABBANDONATO IMPACT FACTOR



The number of peer reviewed publications and preprints that can be listed is limited to ten (five for Starting Grant applicants). While it is expected that the publications have a significant reach, applicants are explicitly asked not to include the Journal Impact Factor.

### nature

June 2021

nature > career news > article

CAREER NEWS | 25 June 2021

IL OLANDA HANNO **ABBANDONATO IMPACT FACTOR** 

Impact factor abandoned by Dutch university in hiring and promotion decisions

Faculty and staff n open science.

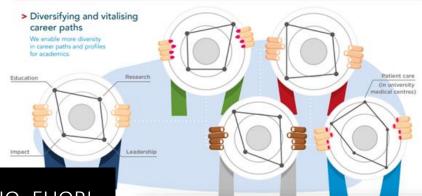
Stepping Out of the Rat Race

**BELGIO: FUORI** DALLA CORSA

emphasize quantitative metrics ut their goals and what they are

Room for everyone's talent

towards a new balance in the recognition and rewards of academics



DORA @DORAssessment · 5h

Read about their process:

LUSSEMBURGO: CV NARRATIVO

ational Research Fund develops an ... on Research Assessment (DORA) need to improve the ways in which ...

May 16, 2021

The Luxembourg National Research Fund (@FnrLux) is developing an action

plan for responsible research assessment, which includes the introduction of a narrative CV format based on the @royalsociety Resume for Researchers.

### **RISCHIO:**

- RIMANERE ESCLUSI
- METTERE IN DIFFICOLTÀ I RICERCATORI/LE COLLABORAZIONI

nal drivers)

e 'Streetlight Effect')

- WHO are you evaluating? (Entity size)
- WHY are you evaluating?

CONTEXT considerations

Do you need to evaluate at all?

#### **OPTIONS** for ev

Consider bo

- Be careful v Evaluate wi

#### PROBE deeply

VALUTA

UK: A «COSA» SI

DÀ VALORE E SI

WHO might your evaluation approach discriminate against?

- HOW might your evaluation approach be gamed? WHAT might the unintended consequences be?
- Does the cost outweigh the benefit?

#### **EVALUATE** your evaluation

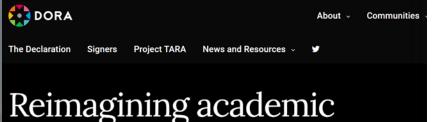
- Did your evaluation achieve its aims?
  - Was it formative as well as summative?
- Keep your approach under review

#### STEPS FOR REALISING THE VISION FOR FAIRER ASSESSMENTS 2021 MAKE IT MEANINGFUL MAKE IT POSSIBLE MAKE IT REWARDING FAIRER ACADEMIC ASSESSMENTS FINLANDIA: RICONOSCERE E VALUTARE LA DIVERSITÀ **EXAMPLE RESEARCH DAT** Identify practices (e.g.): Develop einfrastructures for: Reward researchers for (e.g.): · Publishing and sharing Sharing datasets Sharing research data · Creating FAIR data Using open data Integrating metadata and indicators Data citations for research data practices

### Start with what you value

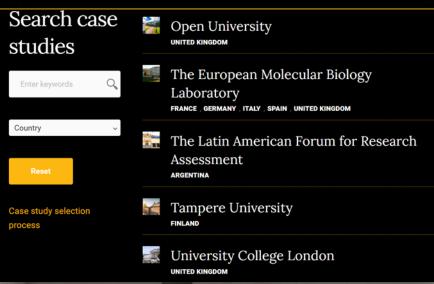
- Context considerations
- Options for evaluating
- Probe deeply
- **Evaluate**

## ...in pratica

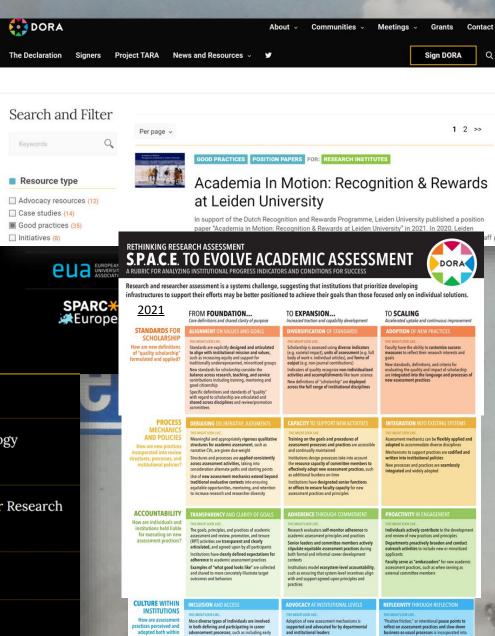


assessment: stories of innovation and change

Case studies of universities and national consortia highlight key elements of institutional change to improve academic career assessment.



https://sfdora.org/dora-case-studies/



adonted both within

and outside of formal

evaluation activities?

advancement processes, such as including early career researchers on RPT committees

Representation of minoritized applicants meets

intentionally designed to provide ongoing support for underreprsented hires

or exceeds equity goals for both new hires and

All individuals actively contribute to building

adopted as a default by faculty, administrate

more equitable practices—not just minor

reflect on assessment practices and slow down business-as-usual processes is incorporated into both formal and informal assessment practices

cesses achieve a balance of effectiveness and

# In pratica

### <u>Agreement</u>

Annex 4 – Toolbox: practical tools and options to consider

collaboration leading to outputs or impacts that

otherwise would not have been achieved

#### Commitment Examples of tools to support this commitment/ options to consider Recognise the diversity of contributions to, Enable greater diversity in career paths and profiles and careers in, research in accordance by recognising more diverse competencies and with the needs and nature of the research talents5 Use approaches that allow academics to make a mark in one or more key areas of study that are important to them, and allow their area profile to change over the course of their career6 Use a **portfolio approach** to test competencies or progression in different domains relevant to the researcher's role7 Base research assessment primarily on Consider specific actions captured under the Leiden qualitative evaluation for which peer Manifesto<sup>8</sup> review is central, supported by responsible Explore options for assessment; as a rule of thumb, use of quantitative indicators mutice quantitative indicators for quantitative things (if Avoid the use of rankings of research Consider specific actions described in the INORMS<sup>12</sup> organisations in research assessment tools for rethinking global university rankings Consider the recommendations in the Metric Tide report13 Commit resources to reforming research assessment as is needed to achieve the organisational changes committed to Review and develop research assessment criteria, tools and processes [Part 1 - Criteria for units and institutions] Consider a 'narrative CV for institutions' that could With the direct involvement of research include case studies on how early sharing of data or organisations and researchers at all career collaboration efforts have resulted in knowledge stages, review and develop criteria for generation e.g. others building on shared data or

assessing research units and research

interoperability

performing organisations, while promoting



Europe

Australia & NZ

Africa

World

Opinion

Dec. 12, 2022

OPINION 12 DEC 2022

### The tide is turning. Revisiting the Metric Tide

By Stephen Curry, Elizabeth Gadd and James Wilsdon







We propose that the REF realises and rewards more of that latent value by placing greater weight on the environment statement (following an evidence-informed narrative structure). This could include issues such as gender and race equality, team-leadership skills, workload management, and measures to eliminate bullying and harassment. The data needed to support such an innovation need to be carefully considered, to avoid growing the assessment burden of the REF.

Overall, despite valuable innovations in recent years (e.g. the Initiative for Open Citations and Overton.io) there is still no magic solution to the challenges of large-scale research assessment. We remain persuaded that a mixed-methods approach will best serve the purposes of the REF.

If the purposes of the REF are clear, there is an opportunity for more radical surgery, which we suggest takes place over two REF cycles to allow the research community time to consult and co-design. One option worth exploring is to reconsider the scale at which assessment is performed, potentially moving from department-level units of assessment to main panel or institution-level. This would create scope for the use of aggregated data which may provide a more reliable indication of dimensions of research quality.

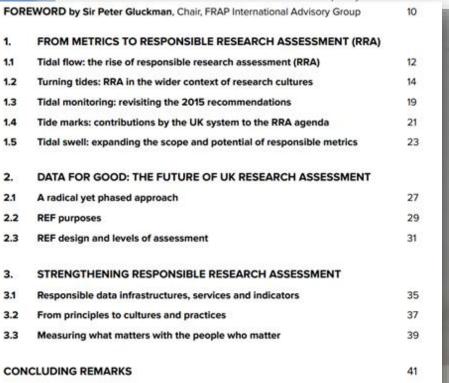


#### HARNESSING THE METRIC TIDE:

indicators, infrastructures and priorities for responsible research assessment in the UK

Stephen Curry, Elizabeth Gadd and James Wilsdon

Report of The Metric Tide Revisited panel 2022 December 2022

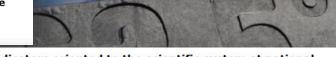




Our remit is to give advice on indicators to foster the engagement of researchers with open science. Currently, researchers are usually not encouraged to engage in open knowledge practices. In career and research assessments open knowledge is usually not part of the performance requirements. The extra work involved may also be off-putting, especially in very competitive fields. And often it is simply unclear what "open science" should mean in practical terms. Therefore, simply taking away the current career and assessment criteria and replacing them with novel performance criteria that are oriented towards open science will not work. There are too many factors that hinder or promote open knowledge practices and they interact with each other. This creates a puzzle for the application of indicators in science and scholarship. On the one hand, there is the huge variety of scientific and echolarly practices. Universal indicators cannot address this dynamic variety. On the other nd, it is not practical to expect all scientific communities to have the technical expertise develop and apply their own indicators in a responsible way. This explains why the ernative to universal indicators, creating large baskets of potential indicators that users a choose from as they see fit, is not advisable either.

Indicator Frameworks for Fostering Open Knowledge Practices in Science and Scholarship

2019



### 1. Infrastructure indicators oriented to the scientific system at national, international and disciplinary levels

The first suite of qualitative and quantitative indicators of the development of open knowledge infrastructures includes their creation, the growth of their numbers, the nature of their contribution, and their use and uptake by the research communities. This toolbox should build on the results of the Open Science Monitor and be linked to the European Open Science Cloud.

#### 2. Indicators of open knowledge capabilities in research communities

The second toolbox of quantitative and qualitative indicators monitors the levels of open knowledge capabilities in the scientific and scholarly communities (including their support personnel). This toolbox will enable the identification of resource availability in specific communities, thus highlighting success cases as well as measures needed to redress the scarcity of capabilities in order to increase the inclusiveness, diversity and equity of the research system.

#### 3. Indicators of pioneering open knowledge practices

The third toolbox consists of a suite of mainly qualitative, case-study based indicators, maintained and regularly updated on a public platform, that give a state-of-the-art overview of pioneering open knowledge practices. The database of case studies organized in the context of the UK Research Excellence Framework maintained and openly accessible, might be an excellent starting point for such ar international platform, provided that mechanisms are also built in for review and update on ongoing developments and initiatives. This platform may be maintained by a collective investment in the form of an annual fee by funders, publishers, and research performance organizations. Alternatively, it may be maintained in the context of an Annual Open Science Observatory (see below).

#### 4. Individual level indicators for careers

The fourth toolbox consists of a suite of career-oriented qualitative and quantitative indicators, based on the principles of responsible metrics as formulated by the Metric Tide, the Leiden Manifesto for Research Metrics, and the DORA declaration Again, it is not necessary to start from scratch, as several prototypes and basic design matrices for this toolboxes have already been proposed (eg. the ACUMEN portfolio, and the Open Science Career Evaluation Matrix). In relation to the use of

Indicator	OS Dimension indicated	Infrastructure	Capabilities	Champions	Career assessment	Data source	Strengths	Weaknesses	Potential
Types of data usage	A typology of different kinds of data usage	٧	N	EXEMPLARY CASES	N	Surveys among data users	Identifies developing demand for data	Must be done with a certain periodicity and with the same groups for comparability	Insight into actual data use
Accessibility of open data or code as % of all data or code produced by publicly funded projects.	Accessibility	Y	N	EXEMPLARY CASES	N	Researchers, Universities, funders	Encourages openness.	Privileges groups with money and competence to engage with research	Tracks open data infrastructur e
Nr Funders requiring TOP Guidelines in publications	Adoption of TOP Guidelines	Υ	N	EXEMPLARY CASES	N.	Cos.io	Monitors OA	Survey required	
Attitudes of researchers to data sharing Nr publications that can be tracked by the different	Attitudes of researchers to data sharing	N	Y	EXEMPLARY CASES	Y	Surveys	Qualifies types of data sharing behaviior; may identify best practices Monitors Open	Not clear categories yet exist	Inspiring examples may lead to new practices
altmetric sources (e.g. with a	Availability of altmetric data  Data sharing adoption			EXEMPLARY CASES		Scopus, Web of Vasilesky et al. 2017	Data  Monitors Data Sharing	data sharing policies for practice	
Nr Open Data Repositories	Data sharing adoption	Y	Y	EXEMPLARY CASES	Y	Re3Data	Monitors Open Data	practice	
Nr of repositories with open meta-data	Data sharing adoption	Y	Υ	EXEMPLARY CASES	Υ	OpenDoar	Monitors Open Data		
Nr institutes with data management infrastructure	Data sharing adoption	Υ	Υ	EXEMPLARY CASES	N	Surveys	Monitors Open Data		
Nr institutes with FAIR data policies	Data sharing adoption	Υ	Υ	EXEMPLARY CASES	N	Surveys	Monitors Open Data	Data sources for	
% of researchers that share data	Data sharing adoption	N	N	EXEMPLARY CASES	Υ	Surveys	Tracks adoption of data sharing practices	this indicator not available in all fields	
% Publications with data	Data sharing adoption	Y	N	EXEMPLARY CASES	Y	DataCite	Monitors data sharing practices	Does not check the quality of the data shared	Encourages data sharing



