



# Shared challenges, transformative actions

OECD Science and Technology Policy Ministerial

23-24 April 2024, OECD, Paris

## **Multistakeholder High-Level Dialogue**

Breakout 1: The future we want in science and technology

Panel B1.1: Making Open Science a reality for the benefit of society



# OECD Publications: open data and open access





# OECD Publications: science communication and public engagement

OECD publishing  
**OPEN RESEARCH AGENDA SETTING**  
OECD SCIENCE, TECHNOLOGY AND INNOVATION POLICY PAPERS  
December 2017 No. 50

OECD publishing  
**ADDRESSING SOCIETAL CHALLENGES USING TRANSDISCIPLINARY RESEARCH**  
OECD SCIENCE, TECHNOLOGY AND INNOVATION POLICY PAPERS  
June 2020 No. 88

OECD publishing  
**ENGAGING CITIZENS IN INNOVATION POLICY**  
WHY, WHEN AND HOW?  
OECD SCIENCE, TECHNOLOGY AND INNOVATION POLICY PAPERS  
June 2023 No. 149

OECD Public Governance Reviews  
**OECD Guidelines for Citizen Participation Processes**

OECD Public Governance Policy Papers N.30  
**Good Practice Principles for Public Communication Responses to Mis- and Disinformation**

OECD  
**Policy Brief**  
**Communicating science responsibly**

**Key messages**

- Responsible science communication is crucial for bridging the gap between science and society, fostering public trust in science, and promoting evidence-based policymaking. Science in this context encompasses all disciplines ranging from science, technology, engineering, and math (STEM) to the social sciences.
- Ensuring effective public communication of science is not a new challenge, but the COVID-19 pandemic and widespread use of social media have created a new context for communication that is more dynamic, interactive, and complex.
- With the spread of mis- and disinformation, some of which is either inadvertently or deliberately propagated by scientists, ensuring the rigour of publicly communicated scientific evidence is of paramount importance.
- As the context and mechanisms for science communication evolve, a major and persistent challenge for scientific institutions is how to communicate responsibly, respecting academic freedom whilst promoting rigour and transparency.

COMMUNICATING SCIENCE RESPONSIBLY © OECD 2023





# Council Recommendations



Recommendation of the Council  
concerning Access to Research  
Data from Public Funding

**OECD RECOMMENDATION CONCERNING ACCESS TO RESEARCH DATA  
FROM PUBLIC FUNDING**

AREAS OF POLICY GUIDANCE

- 1/ Data governance for trust
- 2/ Technical standards and practices
- 3/ Incentives and rewards
- 4/ Responsibility, ownership and stewardship
- 5/ Sustainable infrastructures
- 6/ Human capital
- 7/ International co-operation for access to research data

**EXPANDED SCOPE COVERS RESEARCH DATA, METADATA,  
ALGORITHMS, WORKFLOWS, MODELS, AND SOFTWARE (INCLUDING CODE)**







# COVID-19 and Open Science workshops



**Enhancing access to research data during crises**  
Lessons learned from the COVID-19 pandemic

OECD Global Science Forum

**Virtual workshop hosted by the Research Data Alliance (RDA)**  
23 April 2021, via Zoom, 12:30-16:00 CET (Paris time)  
[Http://oe.cd/RDAworkshop](http://oe.cd/RDAworkshop)



**Improving academia-private sector interactions**  
Lessons learned from the COVID-19 pandemic



**PUBLIC COMMUNICATION AND ENGAGEMENT IN SCIENCE:  
LESSONS LEARNED FROM COVID-19**

— Virtual Workshop organised by the OECD Global Science Forum (GSF) —  
20 April 2022, 12.00-16.15 CET (Paris time)



**Research Infrastructures mobilisation  
in response to COVID-19: lessons learned**

Virtual workshop hosted by the OECD and Science Europe  
11 May 2021, via Zoom, 11:30-15:30 CET (Paris time)  
[Http://oe.cd/SCIENCEEUworkshop](http://oe.cd/SCIENCEEUworkshop)

SCIENCE EUROPE  
Shaping the future of research



11 May 2021 Virtual workshop



Forum (GSF) and Working Party on Innovation  
16 September 2021, 12h



**S&T POLICY 2025**  
Enabling Transitions through  
Science, Technology and Innovation

**Scientific advice in crises:  
Lessons learned from COVID-19**

Virtual Workshop organised by the OECD Global Science Forum (GSF)  
3-4 March 2022, 12.00-16.00 CET (Paris time)  
[oe.cd/scientific-advice](http://oe.cd/scientific-advice)





# Open Science statistical data

OECD publishing



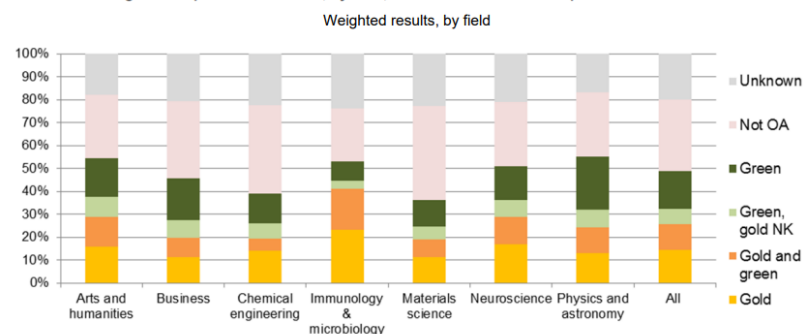
## Drivers and Implications of Scientific Open Access Publishing

FINDINGS FROM A PILOT OECD INTERNATIONAL SURVEY OF SCIENTIFIC AUTHORS

Brunella Boselli,  
Fernando Galindo-Rueda



Figure 6. Open access status, by field, based on author's self-reported information



Source: OECD Pilot Survey of Scientific Authors 2014/15. NK means not known.

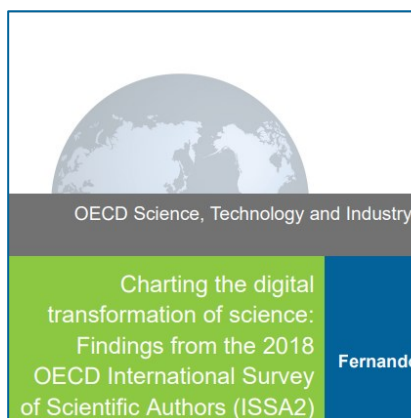
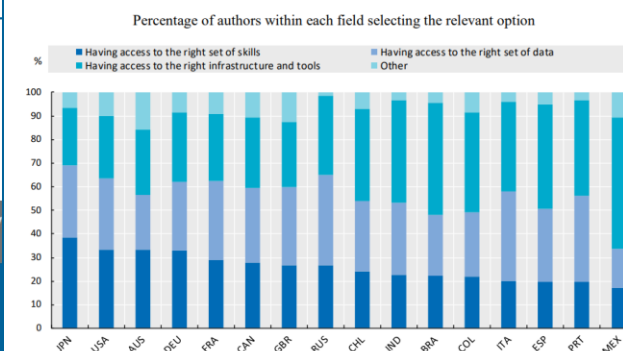
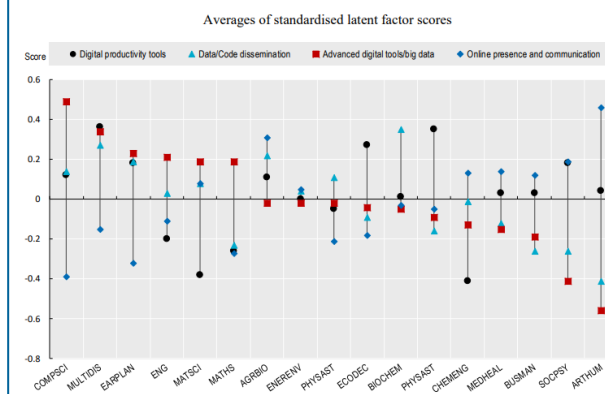


Figure 5.2. Most important challenge faced by scientific authors, by country of residence



Note: Weighted estimates based on sampling weights adjusted for nonresponse.  
Source: OECD International Survey of Scientific Authors (ISSA), 2018. <http://oe.cd/issa>.

Figure 3.28. Patterns of digitalisation in science, by field




Note: Figures refer to the weighted average of the four standardised factor scores representing latent digitalisation indicators within each science field. Sampling weights adjusted by nonresponses are used in the weighting procedure. The factor analysis is based on the responses by scientists to questions relating to the use of digital tools or adoption of digitally enabled practices. The resulting four factors have been interpreted and labelled based on how strongly they correlate with the survey-based underlying variables. Factor scores are estimated in units of standard deviations from their means and represent a person's relative position on a latent factor compared to the rest of the individuals.

Source: OECD International Survey of Scientific Authors (ISSA), 2018. <http://oe.cd/issa>.






# STIP Compass: Open Science policies

OECD.org OECD AI Observatory Digital Economy Policy Platform

Home Visualise data Search data Trends & data Thematic portals About



## STI policies for Open Science

A portal providing insights on STI policies in support of Open Science in territories across the OECD, the EU and beyond.

Home — Open Science policy portal

Search for a specific dashboard in Open Science policy portal...

### Why an Open Science policies portal?

Note: This portal is currently in beta stage. Updates to its design and the data presented are possible in the next months.



Open Science is increasingly attracting the attention of policymakers who aim to make both the scientific process and its outcomes more open and inclusive for all relevant actors, both within and outside the scientific community. It has the potential to accelerate progress toward the Sustainable Development Goals by addressing existing inequalities in science, technology, and innovation and includes: 1. Open access to scientific information and publications; 2. Making research data and software FAIR (Findable, Accessible, Interoperable, Reusable); and 3. Enhanced engagement of civil society.

This thematic portal on Open Science leverages the EC-OECD STIP Compass database, which consolidates qualitative and quantitative data on national trends in science, technology, and innovation into one comprehensive resource. To support government agencies, academic institutions, the private sector, and other stakeholders engaged in Open Science, this portal offers insights into key policy initiatives undertaken by national governments, categorized by territory, policy theme, policy instrument, and target audience.

### 562 policy initiatives

827 policy instruments

Download initiatives

 Download .xlsx file  Download .xml file


Please cite the database as: EC-OECD (2024), STIP Compass: International Database on Science, Technology and Innovation Policy (STIP), edition April 15, 2024, <https://stip.oecd.org>

### 562 initiatives related to open science

[View all](#)

### Territories

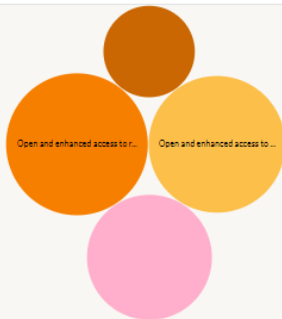
Click the flags below to access the territory dashboards



### Themes


By initiative count

All values



### Target groups

All values



### Policy Instruments

By policy initiative

Information services and access to datasets Initiatives : 177	Networking and colla... Initiatives : 65	Creation... Initiative...
Public awareness campaigns and other outreach activ... Initiatives : 155	Formal... Initiative...	Project... Initiative...
	Dedicat... Initiative...	
	Policy intelli... Initiatives : 25	Instat... Initiative...
	Horiz... Initiative...	
Strategies, agendas and plans Initiatives : 126	Science and L... Initiatives : 24	Gr... Initiative...
	Science and L... Initiative...	R... Initiative...
		S... Initiative...

[stip.oecd.org/stip/open-science-portal](https://stip.oecd.org/stip/open-science-portal)

