



United Nations  
Educational, Scientific and  
Cultural Organization



# Towards a UNESCO Recommendation on Open Science

*Building a Global Consensus on Open Science*

# Why Open Science?

In the context of pressing planetary and socio-economic challenges, sustainable and innovative solutions require efficient, transparent and vibrant scientific efforts, not only stemming from the scientific community, but from the whole of society.

To ensure that science truly benefits the people and the planet and leaves no one behind, there is need to transform the entire scientific process. **Open Science** is a movement aiming to make science more open, accessible, efficient, democratic, and transparent.

Driven by unprecedented advances in our digital world, the transition to Open Science allows scientific information, data and outputs to be more widely accessible (**Open Access**) and more reliably harnessed (**Open Data**) with the active engagement of all relevant stakeholders (**Open to Society**).

By encouraging science to be more connected to societal needs and by promoting equal opportunities for all (scientists, innovators, policy-makers and citizens), Open Science can be a true game-changer in fulfilling the **human right to science** and **bridging the science, technology and innovation gaps** between and within countries.

However, in the fragmented scientific and policy environment, **a global understanding of the meaning, opportunities and challenges of Open Science** is still missing. UNESCO is therefore taking the lead in building a global consensus on Open Science, including a common definition, a shared set of values and proposals for action.



Open Science has the potential to improve the entire scientific process



Components of Open Science

## Why a global UNESCO Recommendation on Open Science?

The Open Science movement has emerged from the scientific community and has rapidly spread across nations, calling for the opening of the gates of knowledge. Investors, entrepreneurs, policy makers and citizens are joining this call.

The question is no longer whether Open Science is happening, but rather **how everyone can contribute and benefit from this transition.**

UNESCO, as the United Nations Agency with a mandate for Science, is the legitimate global organization enabled to build a coherent vision of Open Science and a shared set of overarching principles and shared values. That is why, at the 40th session of UNESCO's General Conference, 193 Member States tasked the Organization with the development of an international standard-setting instrument on Open Science in the form of a UNESCO Recommendation on Open Science.

**UNESCO Recommendations** are legal instruments in which “the General Conference formulates principles and norms for the international regulation of any particular question and invites Member States to take whatever legislative or other steps may be required in conformity with the constitutional practice of each State and the nature of the question under consideration to apply the principles and norms aforesaid within their respective territories”. **Emanating from the Organization's supreme governing body, recommendations are intended to influence the development of national laws and practices.**

# What is the path towards the UNESCO Recommendation on Open Science?

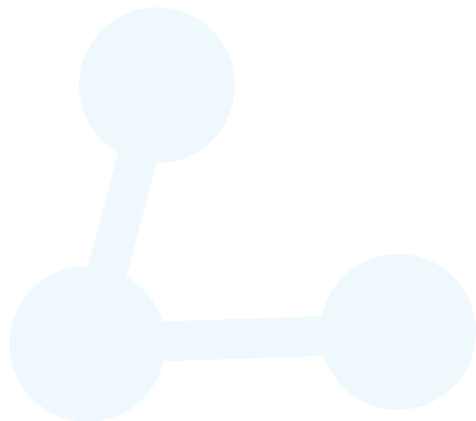
## **The UNESCO Recommendation on Open Science**

aims to build a global consensus on Open Science through an inclusive, transparent and consultative process involving all countries and all stakeholders.

The Recommendation is expected to define shared values and principles for Open Science, and identify concrete measures on Open Access and Open Data, with proposals to bring citizens closer to science and commitments facilitating the production and dissemination of scientific knowledge around the world.

The process of drafting the Recommendation is regionally balanced, inclusive and collaborative. It involves multiple stakeholders and is expected to lead to the adoption of the Recommendation by UNESCO Member States in 2021.

The Recommendation will be part of the follow-up to the 2017 Recommendation on Science and Scientific Research. It will also build upon the UNESCO Strategy on Open Access to Scientific Information and Research and the new UNESCO Recommendation on Open Educational Resources.



# How to get involved?

UNESCO will hold two years of consultation to support an open debate on Open Science awareness, understanding and policy development.

Guided by a multi-stakeholder Open Science Advisory Committee, the process is supported by a global Open Science Partnership and is expected to lead to the development of a vibrant Open Science community of practice across the world.

In developing the Open Science Recommendation, UNESCO is gathering inputs from all the regions and all the interested stakeholders, through online consultations, regional and thematic meetings and numerous debates on implications, benefits and challenges of Open Science across the globe.



**To join the process and for further information, please visit UNESCO Open Science website at <https://en.unesco.org/science-sustainable-future/open-science>**

- Establishment of the **Open Science Partnership**
- Establishment of the **Open Science Steering Committee**
- **Electronic consultation** on the elements of the Recommendation

**Thematic and regional consultation with stakeholders** on the contents of the Recommendation

**Further consultations and inputs** on the final draft

Meeting of the **special committee consisting of technical and legal experts** appointed by Member States (category II meeting)



**Adoption of the Recommendation by Member States November 2021**

**Roadmap to the UNESCO Recommendation on Open Science**

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