



unesco

UNESCO Recommendation on Open Science

The process of development and implementation

UNESCO Natural Sciences Sector,
Division of Science Policy and Capacity Building



Open Science Conference 2022
10 March 2022

Science for People Planet and Peace

Vision of a world at **peace** could not be a world without **science**.



To leave no one behind, it is important to ensure access to science and benefits from scientific progress for everyone.



unesco

UNESCO Recommendation on Open Science

Need for an international policy framework that provides:

- A common definition of open science,
- Shared set of values and principles,
- and set of actions



In 2019, at the UNESCO 40th General Conference, 193 Members States tasked UNESCO with the development of an international standard-setting instrument on Open Science in the form of a UNESCO Recommendation on Open Science.



unesco

Call for Open Science - Accelerated by Covid 19 response

On 30 March 2020, Online Ministerial Dialogue on COVID-19 and Open Science

On 27 October 2020, UNESCO, WHO and the Office of the United Nations High Commissioner for Human Rights issued a Joint Call for Open Science

Open portal to facilitate access to research and information on COVID-19

Open educational resources made available and accessible



**COVID-19
RESPONSE**



unesco

Natural Sciences

Road Map to the UNESCO Recommendation on Open Science

- Establishment of the **Open Science Partnership**
- Establishment of the **Open Science Advisory 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)



Consultative Process

Guided by Open Science Advisory Committee
Supported by a global Open Science Partnership

2 years development process was inclusive, transparent .
International, multi-stakeholder consultative process

Global consultation - 2900 inputs received from 133 countries

Regional consultations – Africa, Arab States, LAC, Asia and Pacific, Eastern Europe, Western Europe and North America



Towards a global consensus on open science

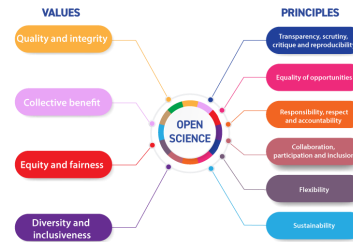
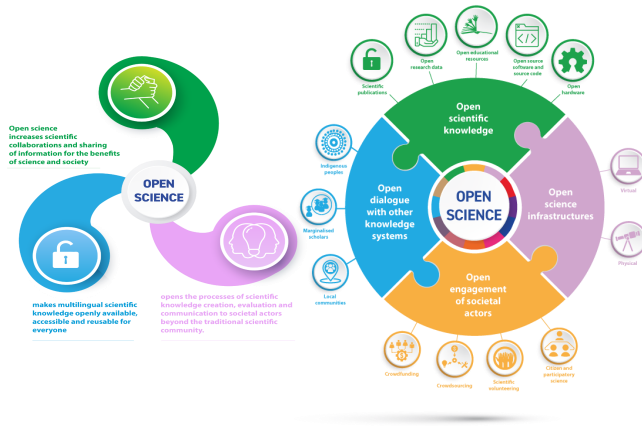
UNESCO led a two-year **inclusive, transparent and consultative process**:

- A global online consultation (online survey) on open science
- Regional multistakeholder consultations for the 6 UNESCO electoral groups
- Thematic consultations and inputs from partners and stakeholder groups
- The draft text of the Recommendation was negotiated by the intergovernmental special committee meeting of experts, May 2021.
- 193 countries at the 41st UNESCO General Conference in November 2021 adopted the Recommendation.



Outline of Open Science Recommendation

Preamble



I
Aims and Objectives

II
A Common Definition of Open Science

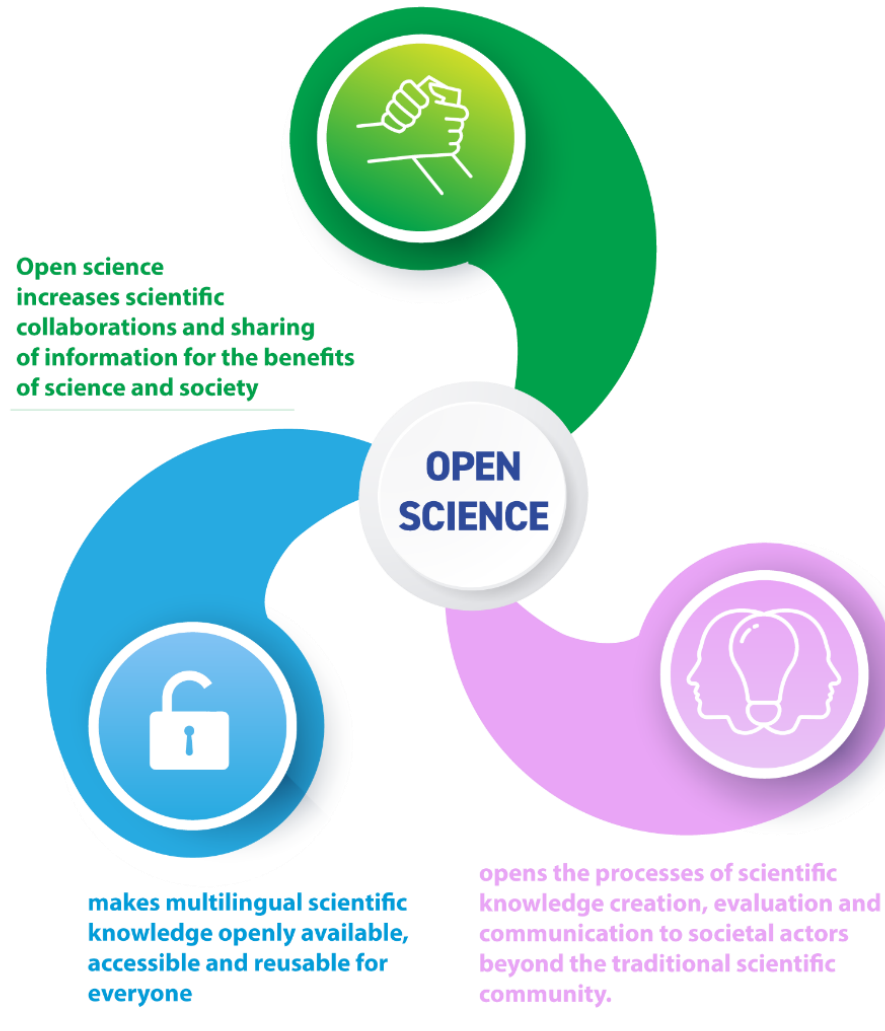
Key Pillars of Open Science

III
Values and Principles of Open Science

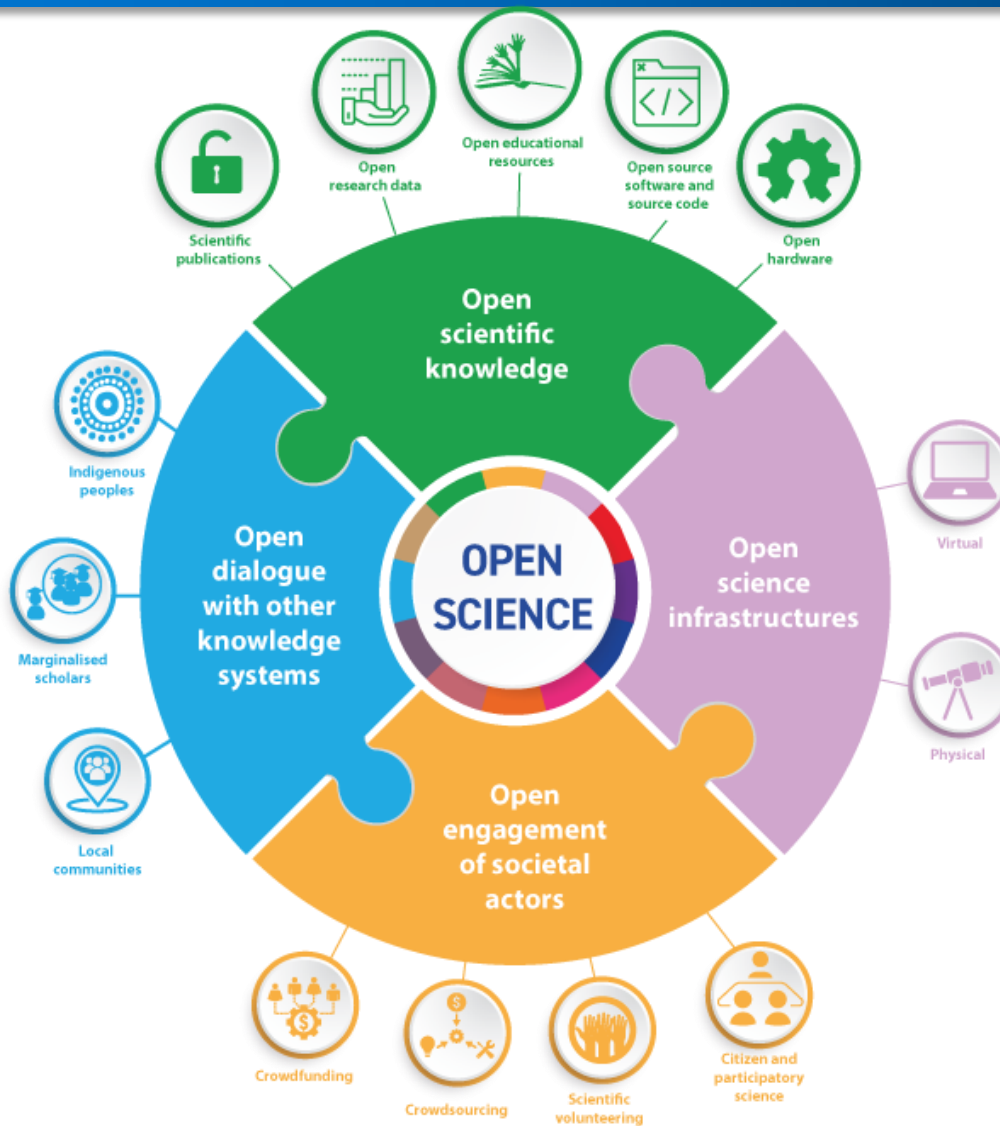
IV
Areas of Action of Open Science

V
Monitoring

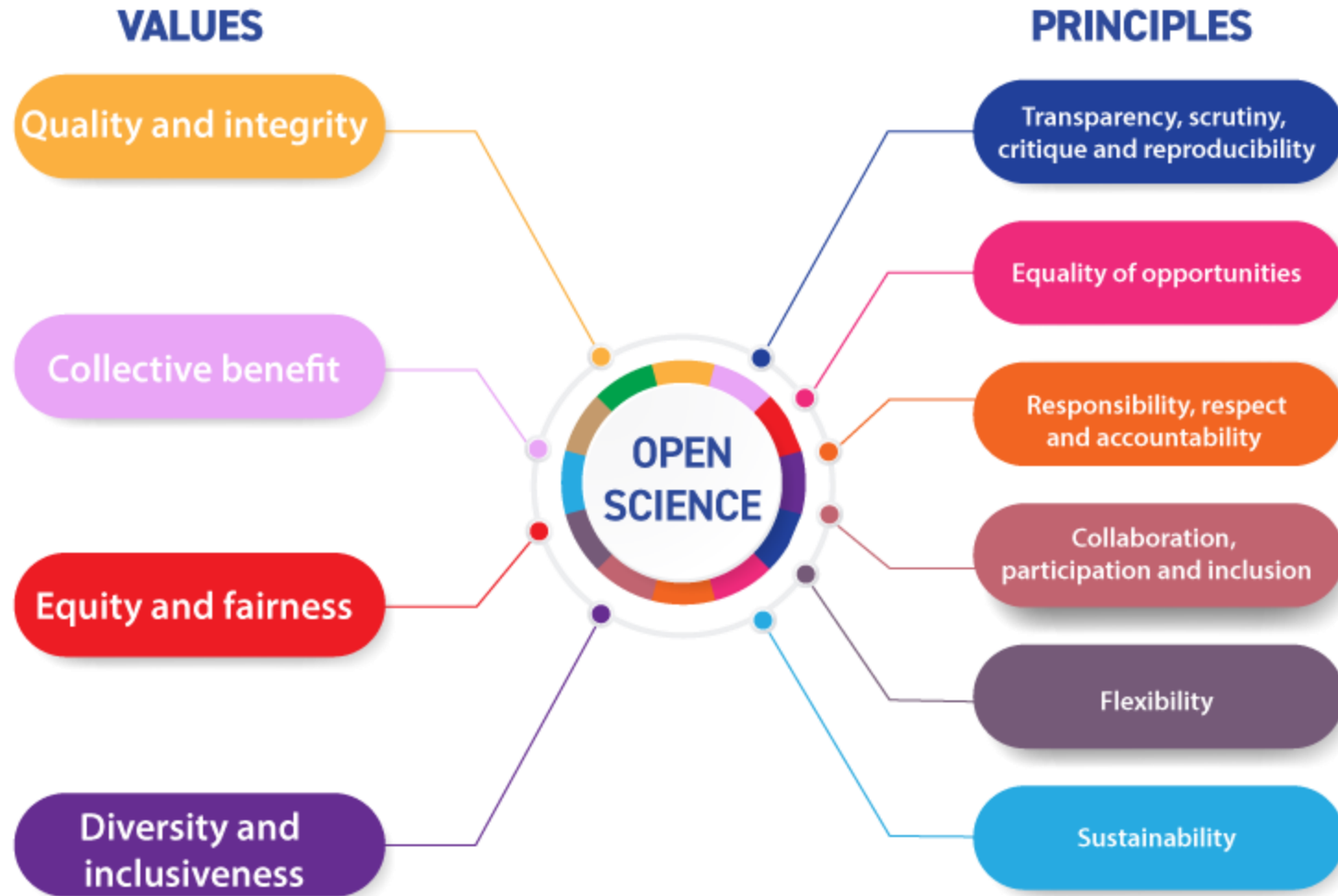
A Common Definition of Open Science



Key Pillars of Open Science



Values and Principles



Areas of Action

OPEN SCIENCE



AREAS OF ACTION



unesco

Key Challenges for the implementation of the UNESCO OSR



- ❖ Change in the conventional scientific culture
- ❖ Capacity building
- ❖ Investment in adequate infrastructures, including reliable internet connectivity
- ❖ Alignment of incentives and revision of criteria for evaluation of scientific excellence and scientific careers
- ❖ Addressing the unintended negative consequences of open science practices, such as high article processing charges, predatory behaviors, migration, exploitation and privatization of research data.

Role of UNESCO in implementation of the Recommendation



- ❖ Exchange of and access to information through UNESCO Science and Open Solutions Programmes
- ❖ Forum for exchange of ideas, good practices, lessons learned on implementation of OS practices
- ❖ Support for open science policy development and orientation
- ❖ Support for open science capacity building for different actors
- ❖ Monitoring of open science status, trends and impacts
- ❖ Mobilization of the Global Open Science Partnership to support the implementation at institutional, national, regional and international levels
- ❖ Building of coalitions and consortia for the advancement of open science

Supporting the implementation of the 2021 UNESCO Recommendation on Open Science

At the global level...

- ❖ Developing a series of supporting tools - technical briefs, fact sheets and guidelines to build an online dynamic **Open Science Toolkit**
- ❖ Collecting and mapping the existing open science policies and strategies to create a **global repository of open science policy instruments**
- ❖ Analyzing open science **financing mechanisms and incentives**
- ❖ Collecting and updating **training materials and strengthening partnerships to build capacity** for open science
- ❖ Developing an **open science monitoring framework**

Supporting the implementation of the 2021 UNESCO Recommendation on Open Science

In the Field Offices...

- ❖ Supporting regional Fora and Platforms for Open Science (CILAC, African Open Science Platform, Arab Open Science Platforms...)
- ❖ Supporting Member States to exchange on and develop their national open science policies and strategies
- ❖ Mapping and supporting regional open science infrastructures to share data, information and best practices
- ❖ Collecting and sharing best practices in open science at institutional level and identifying and connecting open science champion institutions in the regions to exchange on challenges and opportunities and learn from each other
- ❖ Delivering capacity building trainings for different stakeholders

Partners

- ❖ Steering Committee for Open Science
- ❖ Open Science Working Groups
- ❖ Global Open Science Partnership



Next steps towards implementation of the Recommendation



❖ **28 March 2022**, Online meeting on the Implementation of the UNESCO Recommendation on Open Science, with Partners and Member States
<https://en.unesco.org/events>

❖ **28 March 2022**, launch of a **global call for best practices of open science** (online survey)
<https://on.unesco.org/openscience>



Join the open science movement



unesco

Thank you



unesco

United Nations
Educational, Scientific
and Cultural Organization