

United Nations • Educational, Scientific and • Cultural Organization •

Sustainable Development Goals

UNESCO's Roadmap for a possible Recommendation on Open Science

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Why Open Science in UNESCO?

Because f the "S"

Because of the SDGs

Because of the Human Rights

Because of the Normative Power



What is Open Science?







What is Open Science?

Open access to information

Access to data

Access to networks



- UNESCO's Executive Board decided to include an item on the technical, financial and legal aspects of the desirability of a standard-setting instrument on open science in the provisional agenda of the 40th session of the General Conference.
- The Executive Board also invited the Director-General to continue holding intergovernmental consultations in presentia, with a view to the possible elaboration of a recommendation on open science and requested the Director-General to present a consolidated roadmap to the 207th session of the Executive Board. 5



The organization of the process leading to the possible adoption of the UNESCO Open Science Recommendation

1. The three-year (2019-2021) consultative, inclusive and transparent process leading to the possible adoption of the Recommendation will be led by UNESCO Member States and:

- Facilitated by an internal multisectoral UNESCO Open Science Team;
- Supported by a broad Open Science Partnership;
- Steered by an Open Science Advisory Committee;



- 2. The internal multisectoral UNESCO Open Science Team, coordinated by SC, includes representatives from the five programme sectors (SC, CI, ED, CLT and SHS). Its objectives are to:
 - Elaborate an inventory of ongoing work on Open Science across UNESCO;
 - Identify the existing mechanisms and documentation on Open Science within the United Nations and relevant regional groupings of states;
 - Develop the relevant studies, preparatory briefs and a draft Roadmap for the Recommendation, as presented in this document, for the consideration of the UNESCO Member States;



 Organize large consultations with Member states, National Commissions, networks of young and experienced researchers, academics, public and private scientific institutions on:

the definition of Open Science;
the Scope of the draft Recommendation;
the Provisions of the draft Recommendation;

• Organize the consultations among the Member States leading to the possible adoption of the Recommendation by the UNESCO General Conference in 2021.



3. Bring together all the relevant and interested Open Science stakeholders across the world into a broad **Open Science Partnership**. The Partnership will be open ended and include interested Member States, scientific communities, public and private science, technology and innovation institutions, relevant private sector and industry, United Nations agencies. *Inter alia* the Partnership will include:

- UNESCO Chairs and Centres; and university associations such as the Association of African Universities;
- The World Academy of Sciences (TWAS) and the International Centre for Theoretical Physics (ICTP);
- The International Science Council (ISC);



- Institutions such as the Synchrotron-Light for Experimental Science and Applications in the Middle East (SESAME) and the European Organization for Nuclear Research (CERN), with whom UNESCO developed the free digital library Invenio used in Africa for capacitybuilding;
- The Global Young Academy, which is the voice of young scientists all around the world and has a Working Group on Open Science;
- The United Nations Technology Facilitation Mechanism, in particular its Inter Agency Task Team on Science, Technology and Innovation for SDGs;
- The World Intellectual Property Organization ;
- The African Open Science Platform, developed by the International Council for Science with the support of UNESCO;

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- The Confederation of Open Access Repositories;
- The African Academy of Science
- 4. Establish the Open Science Advisory Committee to guide and advice on the process leading to the Recommendation. The 15 members will include representatives of Member States from the six electoral groups of UNESCO and representatives of key scientific bodies/institutions dealing with Open Science and interested donors. Its role will be to steer the consultative process leading to the Recommendation by:
 - providing expert and strategic advice;
 - ensuring delivery of the process milestones;
 - providing support with fundraising.



THE TIMELINE FOR THE PREPARATION AND APPROVAL OF THE ROADMAP

WHAT HAS BEEN ACHIEVED SO FAR ON THE ROADMAP

Project preparation phase: January to October 2019

(i) Preliminary study prepared on the technical, financial and legal aspects on the desirability of a standard-setting instrument on Open Science, including a draft Roadmap, based on the *Rules of Procedure concerning recommendations to Member States and international conventions covered by the terms of Article IV, paragraph 4, of the Constitution*;

(ii) Preliminary study and the draft Roadmap submitted to the Executive Board at its 206th session (April 2019);

(iii) Bibliographic study on the definition(s) of Open Science initiated;

(iv) An information meeting organized for Member States on the draft consolidated Roadmap (June 2019).



Consolidation and deployment phase: October to November 2019

- (i) Submission of the draft consolidated Roadmap to the Executive Board at its 207th session (October 2019);
- (ii) Multi-stakeholder workshop on Open Science in Africa (October 2019-TBC);

(iii) Submission of the preliminary study and of the consolidated Roadmap, with the observations and decisions of the Executive Board at its 206th and 207th sessions of, to the General Conference at its 40th session (November 2019).



Implementation phase and adoption of the draft Recommendation (depending on the decision by the General Conference): December 2019 to February 2022

(i) Publication of a brochure and other communication material (e.g. short video) for the general public on the initiative, based on the preliminary study, the roadmap and including observations of UNESCO's governing bodies (December 2019).

(ii) Establishment of the Open Science Partnership (December 2019)

(iii) Establishment of the Open Science Advisory Committee (December 2019)

(iv) Mobilization of Open Science Partnership and organization of an electronic consultation with UNESCO Chairs, Cat 2 Centers, external partners, National Commissions and Member States on the draft definition of Open Science and the scope of the Recommendation (January-February 2020);

(v) Based on the inputs received, preparation by the Secretariat of the first draft text of the Recommendation (March 2020); 14



- (vi) Consultation with relevant stakeholders to collect inputs for the drafting of the Recommendation: (a) UNESCO centres and Chairs, and key science partners; (b) Open consultation with key scientists, young researchers, university professors, academicians and intellectuals, engaged citizens, and relevant public and private entities (April 2020);
- (vii) Organization of six regional multistakeholder meetings (one in each region), including representatives of Member States (from May to September 2020) to collect comments on the first draft of the recommendation;
- (viii) Communication of the Director-General's preliminary report on the proposed recommendation, accompanied by the first draft of the recommendation, to the Member States (September 2020) for their comments by end January 2021;
- (ix) On the basis of the comments received by Member States, communication of the Director-General's final report containing a draft of the recommendation to the Member States (April 2021);



- (x) Submission of the final report to the special committee consisting of technical and legal experts appointed by Member States (category II meeting) (July 2021);
- (xi) Submission of the draft recommendation to the General Conference at its 41st session with a view to its adoption (November 2021);
- (xii) Subject to adoption of the Recommendation by the General Conference at its 41st session, organization of a Global Conference to present the Recommendation will be foreseen in February 2022.



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Towards a UNESCO Recommendation on Open Science



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THANK YOU!