

Topic 5: Open Science

Title: EU-LAC Cooperation: Open Science

Why is this area relevant and which societal challenges does it address?

Open science is relevant to society for several key reasons: (1) It facilitates access to research and data, allowing more people to benefit from scientific knowledge regardless of their location or resources. (2) It promotes collaboration among researchers, institutions, and citizens, fostering the exchange of ideas, and increasing transparency in the scientific process and collective innovation. (3) Overall, open science democratises knowledge and drives social and scientific progress, benefiting society as a whole.

At the beginning of the 21st century, the difficulty and high costs of accessing publicly funded scientific content was identified as a global public problem that needed to be addressed. Accordingly, science, technology and innovation (STI) policies broadened their focus to direct their attention also on improving the system of scholarly communication and on solving the dysfunctions and heavy economic burdens generated by the huge market for scholarly publishing in public R&D systems, giving rise to open access policies. These were marked as priorities, first by the European Union (EU), then by the EU's Member States, the Organization for Economic Cooperation and Development (OECD) and the United Nations Educational, Scientific and Cultural Organisation (UNESCO)¹.

In this context, the first movements in favour of open access arose, giving rise to the Budapest OA Initiative (2002)², the Bethesda Statement on OA Publishing (2003)³ and the Berlin Declaration on OA in the Sciences and Humanities (2003)⁴, all of which defined OA as online access to all scientific information free of charge to the reader and under licences allowing its use by researchers, companies and citizens, without economic, legal or technological barriers. To achieve this, the Budapest Declaration outlined two complementary strategies: (1) self-archiving in institutional or subject repositories of articles previously published in academic journals; and (2) publication in journals whose business model was not subscription access but open access⁵. Over the past two decades, Latin America has experienced a significant transformation in how open access and open science are viewed. This shift has been driven by key policy statements and tangible initiatives that have laid the groundwork for institutions and networks dedicated to digital resources. Important milestones in this movement include the Santo Domingo Declaration Science for the 21st Century⁶, the Salvador Declaration on Open Access⁷, the CLACSO General Assembly Declaration on Open Access to Knowledge

¹ Rico-Castro, P. (2019): "¿Amigos o enemigos? Cómo la open science pone a las políticas de open access frente al espejo". ("Friends or foes? how open science places open access policies in front of the mirror"). *RUIDERAE: Revista de Unidades de Información*, Nº. 15, 2019.

<https://revista.uclm.es/index.php/ruiderae/article/view/2166>

² Budapest OA Initiative (2002) <https://www.budapestopenaccessinitiative.org/>

³ Bethesda Statement on OA Publishing (2003): <http://legacy.earlham.edu/~peters/fos/bethesda.htm>

⁴ Berlin Declaration on OA in the Sciences and Humanities (2003): <https://openaccess.mpg.de/Berlin-Declaration>

⁵ European Commission: Directorate-General for Research and Innovation, *Open access policies in Latin America, the Caribbean and the European Union – Progress towards a political dialogue*, Publications Office of the European Union, 2023, <https://data.europa.eu/doi/10.2777/90667>

⁶ <https://rieoei.org/historico/documentos/rie20a12.htm>

⁷ <http://biblioteca.clacso.edu.ar/gsd/collect/clacso/index/assoc/D771.dir/12Decla.pdf>

Managed as a Common Good⁸, the Mexico Declaration in Defence of the Latin American Open Access Ecosystem⁹, and the Panama Declaration on Open Science (2018)¹⁰. Besides, countries like Argentina, Chile, Colombia, México, and Perú have developed a national policy on open access, while Brazil, Costa Rica El Salvador, Panamá and Uruguay have developed institutional open access policies.

Added value gained from EU-LAC cooperation for both regions

Open science has a systemic focus, aiming to comprehensively and coherently transform the four key processes of scientific activity:

- (1) Research funding
- (2) Research performance
- (3) Research outputs communication
- (4) Research assessment

This perspective moves beyond the narrower view of open access policies, which tend to concentrate solely on the communication aspect¹¹.

To effectively design open access policies, it is essential for all stakeholders involved in the research cycle activities to be well-coordinated. The challenges faced by countries in Latin America and the Caribbean (LAC) and the EU are similar, as the transition to an open science paradigm exerts significant evolutionary pressures on all STI systems. However, each region has approached these challenges differently due to the unique configurations of their respective institutional R&D ecosystems.

Expected impact for both regions

The LAC and EU regions are defined by a mutual understanding of open science and have established initiatives that align closely, despite their differing contexts. Both regions have confronted the initial challenge of making scientific resources accessible to all through declarations, mandates, and open access policies grounded in digital infrastructures. Recently, both regions have recognised the need for public action to expand their focus on open science and address new challenges, such as evaluating scientific merit¹².

The close alignment of policies between both regions, along with the increasing focus and support that the EU is providing for community-based and non-profit open access initiatives, creates an ideal environment for mutual learning and bi-regional collaboration in open science. The aim is to successfully develop the EU-LAC Common Research Area.

⁸ <https://www.clacso.org.ar/conferencia2015/documentos/asamblea/declaraciones/4-Declaracion-de-CLACSO-sobre%20el-acceso-abierto-al-conocimiento-gestionado-como-un-bien-comun.pdf>

⁹ <http://amERICA.org/index.php/2020/06/12/acceso-abierto-no-comercial-y-la-declaracion-de-mexico/>

¹⁰ <https://forocilac.org/declaracion-de-panama-sobre-ciencia-abierta/>

¹¹ European Commission: Directorate-General for Research and Innovation, *Open access policies in Latin America, the Caribbean and the European Union – Progress towards a political dialogue*, Publications Office of the European Union, 2023, <https://data.europa.eu/doi/10.2777/90667>

¹² European Commission: Directorate-General for Research and Innovation, *Open access policies in Latin America, the Caribbean and the European Union – Progress towards a political dialogue*, Publications Office of the European Union, 2023, <https://data.europa.eu/doi/10.2777/90667>

To advance the engagement between the EU and LAC in addressing common challenges, move towards mutual learning and achieve complementarity of approaches and actions in favour of open access, this call focuses on:

(1) strengthening digital open science infrastructures in both regions, jointly searching for political, technical and technological solutions that are interoperable within countries, among countries and between regions; and (2) moving towards a coordinated reform of the research assessment systems based on open science paradigm in both regions, following the recommendations for a joint policy action on which to base intra-LAC and EU-LAC collaboration published in 2023 ([Open access policies in Latin America, the Caribbean and the European Union: Progress towards a political dialogue](#)).

Additional information: strategic, tactical and operational topics

Proposals may address aspects of open science in general and not just open access, including all research outputs such as data, software, protocols, methodologies, open educational resources, citizen science activities, scientific dissemination, and the reform of the research assessment systems. In addition, alignment with funded initiatives and projects related to this topic, such as EOSC, ORE¹³, LA Referencia, Latindex, SciELO, Redalyc, or specific UE funded projects such as DIAMAS¹⁴, PALOMERA, CRAFT-OA and ALMASI will be highly valued.

¹³ <https://open-research-europe.ec.europa.eu/>

¹⁴ <https://diamasproject.eu/>