

Australian Research Data Commons

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Dr Shamila Nair-Bedouelle Assistant Director-General for the Natural Sciences Sector UNESCO openscience@unesco.org

Dear Dr Nair-Bedouelle,

Letter of Support - First Draft of the UNESCO Recommendation on Open Science

I am writing to express the support of the Australian Research Data Commons (ARDC) for the first draft of the Recommendation on Open Science. The ARDC welcomes the leadership of UNESCO on this commitment that reflects the importance of international scientific collaboration and access to and sharing of scientific information.

The mission of the ARDC is to accelerate research and innovation by driving excellence in the creation, analysis and retention of high-quality data assets. Key to this is promoting data being FAIR (Findable, Accessible, Interoperable and Re-Usable). While this does not always mean data can be Open, this is the ideal to which we should aspire. The current draft reflects that reality and the ARDC appreciates the efforts of the drafters in striking the right balance.

I would like to take this opportunity to specifically thank the staff of the Jakarta Office of UNESCO, as well as the Science Bureau for Asia and the Pacific in collaboration with the International Science, Technology and Innovation Centre for South-South Cooperation. They have done an excellent job in reflecting a broad range of views from the region and we are very pleased to see all of our comments and suggestions reflected accurately.

Although there will be lots of work still to be done before and after consideration by the General Conference, I wish you all the best in the work to achieve a commitment to Open Science from Member countries.

Please find below some minor detailed comments on select sections.

Sincerely,

Rosie Hicks,

Chief Executive Officer, ARDC Ltd.

Specific feedback on draft Recommendation sections

Section 20. This section outlines the important components of Open Science infrastructures. ARDC suggests that two key elements of infrastructure need to be emphasised:

- high quality collections of scientific data that support Open Science. These collections, over and above the
 storage or repository arrangements they sit upon, are the strategic assets of the scientific community. The
 collections require sustained efforts for content curation, governance, buy-in from data generators and
 users, standardisation, quality assurance frameworks, and collection development strategies from discipline
 leadership.
- collaborative platforms or research environments that enable access and analysis. These research environments are a set of services, often with associated integration and/or orchestration functions and connections to specific data resources, that enable researchers to carry out some of their research activities

Section 24. This section outlines the important components of international cooperation for Open Science. Another dimension of international cooperation should be emphasised:

 Global Research Infrastructure: Open Science is an inherently global enterprise and the infrastructure to support universal scientific enquiry often needs to be global in nature. For example global aggregations of data are crucial to addressing global societal challenges. UN Member states can help sustain these global scientific assets by contributing to collaborative resourcing, governance, standardisation, and interoperability arrangements.

Section 25. This section deals with monitoring open science progress. In line with the aspirational and visionary nature of the document, the monitoring activities in this section are at the level of monitoring frameworks. A target is always useful if only to know whether you got there. As a thought experiment, and perhaps independently of this document, UNESCO could outline a "stretch target" indicator for Member states to monitor; for example, the number of open science publications. That is, publications with links to available underpinning data, relevant software, samples, workflows, instruments, etc. In cooperation with the International Science Council and various scientific unions "open science publication profiles" could be nominated for different domain areas.

Additionally, some minor typographical details:

- 15.v there seems to be a hanging redundant clause in the last sentence.
- 16.a this sentence should be re-ordered for clarity: "In a globally interdependent world with new technologies, It is important to reaffirm the epistemological skepticism which is the foundation of Open Science and the source of its success."