Open Access Australasia's response to the Draft National Digital Research Infrastructure Strategy Consultation

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Submitted on behalf of the Open Access Australasia Executive Committee

Open Access Australasia is a membership organisation of 23 Australian university libraries, eight Aotearoa New Zealand university libraries through the Council of New Zealand University Librarians, Creative Commons Australia, Tohatoha Aotearoa Commons, Australian Library and Information Association, Australian Digital Alliance, Wikimedia Australia, the Australian Citizen Science Association and National and State Libraries Australasia. Its mission is to attain open access to research in Australia and Aotearoa New Zealand through advocacy, collaboration, awareness, and capacity building across the Australian and New Zealand research sectors.

This submission was made in response to the Consultation on Draft National Digital Research Infrastructure Strategy using an online questionnaire. What follows below is a reproduction of the answers. Open Access Australasia's response to the multiple-choice questions is indicated by the highlighted text. The written answers were constrained to word limit of 1000 characters per question.

NDRI Strategy Section-specific Responses

Please provide your view on the following statements.

Vision for future NDRI ecosystem A user-centric design (outlined in the "Vision for future NDRI ecosystem" section) is an appropriate foundation for Australia's NDRI ecosystem over the next 10-15 years.

- • Strongly agree
- • Agree
- • Neutral
- • Disagree
- • Strongly disagree

We would suggest that a more enduring foundation would be for the future NDRI ecosystem to be based on the principles of open science as outlined in the UNESCO Open Science Recommendation. The concept of user-friendly systems is discussed in the Recommendation. The advantage of taking this approach would be that it aligns with an already internationally agreed definition and set of shared values. The Open Science Recommendation encompasses Open science infrastructures as one of its four components, along with Open scientific knowledge, Open engagement of societal actors, and Open dialogue with other knowledge systems (including Indigenous Knowledges).

Outcomes

The six Outcomes (identified in the "Outcomes" section) adequately capture the priority features of an Australian NDRI ecosystem that will meet the Vision (described in the "Vision for future NDRI ecosystem" section).

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

We would suggest the need for a more explicit emphasis on open science as outlined in the UNESCO Open Science Recommendation is included in all the outcomes, not just the openly available research software tools. We also suggest that improved equity for and better outcomes regarding Indigenous research and researchers is its own priority outcome.

Challenges

The identified Challenges (outlined under the headings for Outcome 1 to 6) adequately describe the major issues facing the Australian NDRI ecosystem over the next 10-15 years.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

One challenge that is missing is the concern that commercial companies are increasingly acquiring the infrastructure that underlies research and the tools required to use research data. This is a threat, not just because of the risk that public organisations may be tied to commercial entities that they cannot easily extract themselves from in future, but also because such commercial consolidation poses challenges to the privacy and security of data collected and held within these infrastructures.

Outcome 1. Underpinned by training frameworks for researchers and NRI workforce.

The content in the "Underpinned by training frameworks for researchers and NRI workforce" section adequately presents the high-level information expected for this section of the NDRI Strategy.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

There is a need to align incentives into any training framework, so that researchers and others who support digital infrastructure are adequately rewarded, including within academic assessment processes. There is also a clear need for career pathways for advancement for infrastructure experts.

Outcome 2. Responsive to disruptive technological and societal shifts.

The content in the "Responsive to disruptive technological and societal shifts" section adequately presents the high-level information expected for this section of the NDRI Strategy.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

The UNESCO open science recommendation is mentioned in this section, but it appears somewhat out of context. As noted above our suggestion is that the UNESCO open science recommendation be considered as a foundation for the whole NDRI strategy.

Outcome 3. Consistent in its standards for data collection, curation and access.

The content in the "Consistent in its standards for data collection, curation and access" section adequately presents the high-level information expected for this section of the NDRI Strategy.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

We strongly agree with the need for consistent standards, many of which are already being discussed and implemented internationally. We recommend alignment with international principles. We would also recommend that this section does not just focus on data but includes all research outputs as well as the underlying infrastructure.
We believe that there is a need for a more nuanced discussion of this part of outcome 3 - “This creates challenges in differing access needs between the different types of datasets – for example, between open access research and commercially confidential projects.” The FAIR and CARE principles can be applied to data or indeed any research output without it being made fully open; the need for commercially confidential projects should not be used as an excuse to sidestep these principles.

Outcome 4. Integrated across levels of computing and data

The content in the "Integrated across levels of computing and data" section adequately presents the high-level information expected for this section of the NDRI Strategy.

- Strongly agree
- Agree
- Neutral
- Disagree

• Strongly disagree

A national approach to open science would provide principles to guide the development of linked national digital infrastructure in particular “consistent and national approach to services, tools, workflows, and governance” and “ integration between major data producers and data processing and storage capabilities”

Outcome 5. Cybersecure, particularly for national-scale data and computing

The content in the "Cybersecure, particularly for national-scale data and computing" section adequately presents the high-level information expected for this section of the NDRI Strategy.

• Strongly agree
• Agree
• Neutral
• Disagree
• Strongly disagree

Outcome 6. Maximised by openly available research software tools

The content in the "Maximised by openly available research software tools" section adequately presents the high-level information expected for this section of the NDRI Strategy.

• Strongly agree
• Agree
• Neutral
• Disagree
• Strongly disagree

It is good to see this suggestion “Providers of software tools should also be guided by the principles described in the UNESCO recommendation on open science.” but we suggest it is extended beyond software. The current trend in providing a basic free research tool but requiring subscription to access its true function (especially AI driven features) does not align with these principles.

NDRI Strategy Overall Response

Overall, the presented NDRI Strategy will help shape a future Australian NDRI ecosystem that meets the rapidly growing demands of researchers and other users for increasingly complex digital tools and services.

• Strongly agree
• Agree
• Neutral
• Disagree
• Strongly disagree

As noted in our responses above we suggest that the UNESCO Open Science Recommendation would provide a set of strong foundational principles for the NDRI. We believe this could form one part of an Australian national approach to open science.