

Draft 2016 National Research Infrastructure Roadmap Submission

Council of Australian University Directors of Information Technology (CAUDIT)

CAUDIT is a member-led Association supporting the use of information technology in its member organisations – the universities and key national research institutions of Australia, New Zealand, Papua New Guinea, Fiji and Timor-Leste. Member Representatives are the CIOs, CDOs and IT Directors of each member organisation.

While not specifically considered in the Roadmap, institutions are part of the research ecosystem and must be engaged in the definition and have input to the operation of the Australian Research Data Cloud along with associated organisations such as the AAF and AARNet.

Views on the key recommendations, research infrastructure focus areas and associated priorities:

1. **Adopt Nine Focus Areas**

Digital Data and eResearch Platforms – The network and access and authentication are vital components of the ecosystem. The AAF and AARNet perform enduring functions. The role of institutions in connecting to and supporting these is key.

Cybersecurity – while a critical area in business and higher education, cybersecurity has not been identified as one of the nine focus areas. Cybersecurity needs to be ‘designed in’ to facilities and research from the ‘get go’. It can no longer be approached as an after-the-fact activity. As such, it impacts all nine focus areas rather than just the two highlighted in Table 2 on page 23 of the Roadmap. It is also an area where Australia has an opportunity to take a lead role in research and adoption and is well positioned to do so.

2. **Establish a Research Infrastructure National Advisory Group**

It is recognised that this is a vital component for success.

3. **Develop a Roadmap Investment Plan**

Ideally this Plan will incorporate flexibility to be able adaption to the environment while providing a sufficient degree of certainty to the community.

5. **Skilled Workforce**

It is good to see that the need for, and scarcity of, both skilled technical and management staff to support research is recognised. An ever increasing level and specificity of digital literacy is required in all three groups. See also comments below relating to governance.



6. Note that Existing Landmark Facilities will require ongoing investment

Certainty of funding, while the facility remains relevant and meets the criteria set for 'Landmark Facilities' is essential in order to maintain facilities at the level required and, perhaps more importantly, retain the skilled staff in the face of personal employment needs and increased competition internationally.

8. Raise Awareness of national research infrastructure

A single portal listing all national research infrastructure and how to access it is often suggested. The principles adopted by the Federal Government via the Digital Transformation Agency may provide some guidance for participants.

9. Urgently Address National High Performance Computing (HPC) needs

Support for this recommendation.

Access to research infrastructure

Barriers to entry (access) need to be reduced and standardised especially where facilities provide the same or similar services. Websites which comply with a standard framework (i.e. to a template) would/should ease access and reporting.

National Research Infrastructure Principles

Support for these principles. Note also the ongoing impact of 'the cloud' for XaaS must be considered and allow funding models sufficient flexibility to cater for these and future changes. (Major infrastructure may take the form of cloud facilities in the future.)

Implementing the Roadmap

Governance

It is good to see the recognition of the two levels of governance – overarching national and program-specific. With regard to program-specific, we support the principle of national governance for national resources. There are examples of where governance/management of individual facilities/research infrastructure has worked well at both a strategic and operational level. We suggest that these examples provide a template and be adopted more broadly across the sector. This is in the detail however, at an operational level, it is suggested that guidance is available from organisations such as the Australian Institute of Company Directors (AICD) in relation to enhancing the professionalism of Boards and expertise of Board members. A suggestion is to set a target such as requiring a majority of Board members to have completed professional development programs as the Company Directors Course with AICD prior to, or within six months of appointment.

Terminology

Use of the term 'project' may lead to some viewing activity solely through the lens of a traditional 'research project'. Perhaps a 'facility' and/or 'service' is a 'project' and if so, this could be made more clear in the Implementation Plan.

