Please note: the substantive content of the 2026 NRI Roadmap Survey begins at Question 20 with prior questions dealing with administrative and other information).
As such all submissions that are published include the responses submitted from Question 20 onwards only.
Part 2: Research themes
2.1 NRI comprises the assets, facilities and associated expertise to support leading-edge research and innovation in Australia and is accessible to publicly and privately funded users across Australia and internationally. We are seeking your input on possible directions for future national-level investment - i.e., where the requirements are of such scale and importance that national-level collaboration and coordination are essential.
The 2021 Roadmap used a challenge framework to support NRI planning and investment. With this in mind, consider likely future research trends in the next 5 - 10 years, and with respect to one or more of the 8 challenge areas identified in the 2021 Roadmap as listed below:  • describe emerging research directions and the associated critical research infrastructure requirements
<ul> <li>describe emerging research directions and the associated chical research impastructure requirements that are either not currently available at all, or not at sufficient scale and</li> <li>describe current national infrastructure requirements that you anticipate will no longer fit the definition of NRI in 5-10 years.</li> <li>Do not limit your commentary to NCRIS funded capabilities.</li> </ul>
Q21. Resources Technology and Critical Minerals Processing

Food and Bever	age		
Q23. Medical Product	ts		
Q24.			
Defence			
Q25. Recycling and C	Clean Energy		
Q26. Space			
Q27. Environment an	d Climate		

<ul> <li>Q29.</li> <li>2.2 The 2024 statement of National Science and Research Priorities (NSRPs) includes outcomes linked to each priority to assist in identifying critical research needed in the next 5 to 10 years.</li> <li>Consider the priority statements and, with respect to one or more of the 5 priority areas as listed below: <ul> <li>describe emerging research directions and the associated critical research infrastructure requirements that are either not currently available at all, or</li> <li>not at sufficient scale and describe current national infrastructure requirements that you anticipate will no longer fit the definition of NRI in 5-10 years.</li> </ul> </li> <li>Do not limit your commentary to NCRIS funded capabilities, and where relevant, refer to the underpinning outcomes and research identified in the NSRPs document.</li> </ul>	
Q30. Transitioning to a net zero future	
Q31. Supporting healthy and thriving communities	

Q32.

## **Elevating Aboriginal and Torres Strait Islanders knowledge systems**

AustLit includes BlackWords, Australia's only bibliographical database of Aboriginal and Torres Strait Islander storytelling, with over 27,000 works and almost 8,000 authors, so we applaud this research priority. BlackWords has been at the forefront of data sovereignty and governance since its launch in 2007 and remains committed to understanding, employing, and modelling respectful data practices, as well as remaining cognisant of how these practices change and develop across time. The successful implementation of this priority, however, is not merely technological. As a piece of national digital research infrastructure, AustLit is particularly supportive of the development and application of digital and data technologies, but these also require cultural research grounded in humanities research practice to ensure wholistic development of technologies. Language preservation and bilingual education is crucial, but this can only be achieved through widespread digitisation, standardised metadata practices, thesauri, and approaches to managing Aboriginal and Torres Strait Islander ICIP, as well as a commitment to reparative indexing, all of which requires substantial investment, as well as commitment to culture, people and story, rather in addition to technological solutions. Additionally, ongoing training and support for Aboriginal and Torres Strait Islander people to lead these crucial tasks must be a priority.

Q33.

Protecting and restoring Australia's environment

#### Q34.

### Building a secure and resilient nation

Building a secure and resilient nation, that is not threatened by misinformation and disinformation, requires a multiplicity of voices and perspectives. It also requires a deep understanding of Australian history and culture. Without these, the nation remains vulnerable. AustLit is a world-leading example of a national bibliographical resource that traces the history and contemporary diversity of Australian storytelling, including works in languages other than English (including Aboriginal and Torres Strait Islander languages), literature from diasporic communities across the continent, and Australian writing translated and republished internationally. It also has a unique curated dataset on Writing Disability in Australia. With over a million work records with extensive metadata, over 200,000 agent records, and 80 discrete curated datasets/research projects, AustLit is well positioned to ensure the history and diversity of storytelling is discoverable and shareable. Maintaining comprehensive, accurate and reliable data and database architecture as the number and range of Australian stories continues to expand remains a key priority and demands substantial investment. A strengthened understanding of the diversity of Australian storytelling, and a capacity to share this information across the nation, will strengthen community trust and mutual understanding.

#### Q35.

2.3 The case for a new NRI capability, or enhancements to existing capabilities, typically emerges through advocacy from research communities clustering around rigorously identified needs and goals. Such a concept could respond to a requirement for novel or expanded capacity within a domain, or across domains, and must be such that it could only be made available with national-level investment.

If you have identified such a requirement, briefly describe the need, the proposed infrastructure capability, the medium-term goals, impacted research communities, and the timeframe over which you advocate its establishment. Your response can include links to relevant existing reports.

AustLit, a bio-bibliographical database and research platform of Australian storytelling meets the definition of National Research Infrastructure and needs to be recognised as such. It is a nationally significant asset storing invaluable data developed over twenty-five years, it serves a broad research community and both supports and hosts leading-edge research in Australian literary studies. The most enduring digital humanities project in Australia, AustLit has enabled radical new understanding of the Australian literary field since the database's inception. AustLit began as a consortium and is now housed at UQ, but it is not infrastructure that can be sustained by any single institution at an institutional level, so it is not infrastructure at an institutional level. AustLit is funded via subscription and its most significant subscriber is the CAUL (Council of Australian University Libraries) consortia, which subscribes on behalf of Australian tertiary institutions. The National Library of Australia and the NSLA (National State Libraries Australasia) are also key subscribers. Through these arrangements, AustLit remains accessible to researchers and community members across the country. AustLit also has a significant international subscriber base including, for example, The British Library, as well as university library subscribers and scholarly associations in the UK, the US, Canada, Europe, China, Japan and India making it a significant international asset as well. It is much loved and well utilised. In 2024, for example, it had almost 2,000,000 page views. AustLit uses the widely shared and mature data model FRBR (Functional Requirements of Bibliographic Records), an entity-relationship model developed by IFLA (International Federation of Library Associations and Institutions). AustLit was, in 2001, the world's first large-scale implementation of FRBR, although many international library systems, including the Library of Congress and WorldCat, have retroactively implemented FRBR. The database architecture was custom-built to implement the model. Each of AustLit's over 1,000,000 work records and 200,000 agent records have been manually indexed by AustLit's data specialists over decades as data expands and grows. The potential of Alenhanced data enrichment to improve the quality of records is promising and this work is beginning, including from the content operations team at Clarivate. (See Elizabeth York, David Hanegbi & Tamar Ganor, 2024, Enriching Bibliographic Records Using AI – A Pilot by Ex Libris, Internet Reference Services Quarterly, 28:3, 287-291, DOI: 10.1080/10875301.2024.2361871). At the moment, AustLit has no capacity to even begin to explore this potential, and there is an opportunity to expand and participate in this project with a range of partners across the sector with national-level investment which will benefit researchers across multiple disciplines in the humanities and beyond, libraries, database custodians, and content providers across the country and the globe.

#### Q36.

# Part 3: Industry perspectives

This section is seeking input specifically from industry-based respondents. Other respondents can skip this section.

Recommendation 6 of the <u>2021 Roadmap</u> related to improvements in industry engagement with NRI. To complement work on this topic that has occurred since then, we are seeking additional advice on NRI requirements as perceived by current or potential industry-based users.

.1 Have you (or your organisation) interreacted with or used Australia's NRI?	
<ul><li>○ Yes</li><li>○ No</li></ul>	
3382 If so, please briefly outline the NRI capabilities you (or your organisation) have interacted with or used. Do ot limit your response to NCRIS capabilities.	
This question was not displayed to the respondent.	
3393 Please indicate your (one or more) primary reasons for interacting with NRI:  This question was not displayed to the respondent.	
0.40. .4 If you answered no, please indicate your (one or more) primary reasons:	
This question was not displayed to the respondent.	

Q41.

### Part 4: Other comments

4.1 Please elaborate on any of your above responses or add any other comments relevant to the development of the 2026 Roadmap. Your response can include reference or links to existing reports that you recommend be considered during the 2026 Roadmap development process.

AustLit provides a compelling case study for the possibilities and challenges of research infrastructure in the humanities. As outlined in Part 2.3, it is a digital platform of national significance with users across the globe. AustLit's significance for literary, cultural and digital humanities research is evidenced by its multi-institutional partnerships via Australian Research Council-funded grants in literary studies. Indeed, many of AustLit's eighty of so curated datasets have been funded by ARC discovery grants, and many of these projects have offered new understandings of the Australian literary field. AustLit is currently a named partner on two DECRAs and three Discovery Projects, partnerships that are central to enabling these projects to generate new data-driven knowledge. These are in projects are diverse and come from multiple perspectives. "Audiobooks and digital book culture" enables for the first time understanding and analysis of the scope and significance of Australian audiobook publishing, both in relation to and distinct from print and other digital books. "Close relations: Irishness in Australian Literature" seeks to transform our understanding of Australian literature by combining existing traditional literary methods, bibliographical approaches and digital/computational methods to investigate the complex role of Irishness in the Australian cultural field in its production, circulation and reception. "Darwin/Garramilla as the Forgotten Literary Capital" yokes together the scores of novels, plays, short stories, poems, and genre fiction titles that have portrayed Darwin/Garramilla from Federation to the present. In spite of these multiple successes, and the clear potential of AustLit to support innovative research in literary studies and digital humanities, challenges remain, including questions of longterm sustainability given sector-wide increasing costs and budgetary constraints. AustLit's ongoing maintenance requires highly-skilled software developers and data experts; sustainability depends on building and retaining this expertise into the future. Moreover, the capacity to analyse the data demands increased training of future generations across both the humanities and the digital world. While funding agencies create pressure to continually innovate (and AustLit is committed to such innovation) the capacity to build new features and capabilities to enable innovation and expansion is not possible without the assurance of long-term maintenance and operational costs, the provision of additional funding, and the increase of skills development across the humanities.

Q49.

4.2 Optional Document Attachment.

Note: Our strong preference is that answers are provided against the relevant questions in the survey. However, this file upload option is available for submissions in file format, where needed. Please ensure the document includes your name or organisation.