

Please note: the substantive content of the 2026NRI 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.

Q20.

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 that are either not currently available at all, or 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.

Do not limit your commentary to NCRIS funded capabilities.

Q21.

Resources Technology and Critical Minerals Processing

Q22.

Food and Beverage

Q23.

Medical Products

My main suggestion is to overcome the cost of making medical product prototypes. I believe that we need a national prototyping facility capable of rapidly turning 'discoveries into devices' (see <https://www.discoverytodevice.au/>). In the absence of a network of institutes like the Franhofer institutes in Germany, this is the perhaps the best that we can do to unlock the innovation potential of start-ups.

Q24.

Defence

Ditto above. If we had a national prototyping facility, I imagine that it would have nodes for medical products, defense products etc and would develop a specialized workforce.

Q25.

Recycling and Clean Energy

Q26.

Space

Q27.

Environment and Climate

Q28.

Frontier Technologies and Modern Manufacturing

ditto above. So many good ideas are never turned into a prototype. Reduction to practice allows for rapid productization models of innovation (in which the markets helps to iterate the design of the product) and also accelerates the interest of investors

Q29.

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.

Consider the priority statements and, with respect to one or more of the 5 priority areas as listed below:

- describe emerging research directions and the associated critical research infrastructure requirements that are either not currently available at all, or
- 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.

Do not limit your commentary to NCRIS funded capabilities, and where relevant, refer to the underpinning outcomes and research identified in the NSRPs document.

Q30.

Transitioning to a net zero future

We need to consider new battery/storage technologies. This is now the frontier of a net zero future. Australia has all of the raw materials for batteries but needs to explore innovative technologies such as sodium batteries etc.

Q31.

Supporting healthy and thriving communities

The cost of providing health care is increasing each year and now constitutes about 11% of GDP and rising each year by 0.3%. This is not sustainable. We need to find ways to use technology to lower the cost of health care, mainly by using the technology to keep people healthy for longer rather than building more hospitals. the idea of personal preventative medicine is now doable because of advances in sensor technology and AI. We need to address this now; otherwise we will see health care being rationed and priority given to those that can afford it.

Q32.

Elevating Aboriginal and Torres Strait Islanders knowledge systems

Q33.

Protecting and restoring Australia’s environment

Q34.

Building a secure and resilient nation

see above. we need to invest in preventative health care as a priority

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.

As above, I believe that we need a national prototyping facility. Furthermore, I would like to propose a radical model in which the facility takes an equity share/royalty which can eventually make the facility self funding.

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 [2021 Roadmap](#) 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.

Q37.

3.1 Have you (or your organisation) interreacted with or used Australia's NRI?

☒ Yes

☐ No

Q38.

3.2 If so, please briefly outline the NRI capabilities you (or your organisation) have interacted with or used. Do not limit your response to NCRIS capabilities.

Mainly the ANFF

Q39.

3.3 Please indicate your (one or more) primary reasons for interacting with NRI:

☐ For expertise or advice

☐ Access to research resources or products

- ☒ Access to equipment for research
- ☐ Access to equipment for operational reasons
- ☐ Help in translating research
- ☐ Access to data
- ☐ Support for clinical trials
- ☐ Other (please specify)

Q40.

3.4 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.

There needs to be integration between NCRIS, the NCGP and the SERD discussion papers and policies

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.