

## **Draft 2016 National Research Infrastructure Roadmap Submission**

Universities Australia (UA) welcomes the release of the draft 2016 National Research Infrastructure Roadmap (the Roadmap). The Expert Working Group are to be commended on the work in bringing together this comprehensive document. It is acknowledged the draft Roadmap is the result of extensive public consultation.

### **Government investment is vital**

Government investment in first class research infrastructure is vital to the long-term sustainability of Australia's research program, driving innovation, economic productivity and social benefits for the nation. National research facilities are built and maintained for the public good. As such there is a fundamental role for government in investing in this critical infrastructure.

Global experience suggests government investment is the most effective model for developing and maintaining national research infrastructure systems. Government investment not only leverages co-investment from other sources, including from universities and state governments, but the return on this investment through the myriad of societal benefits, such as population health, innovative agricultural methods and natural resource discoveries, is high.

Universities play a vital role in supporting the nation's infrastructure system including through cash contributions as well as in-kind support such as staff time.

### **International reputation as a high quality education destination**

World class research infrastructure that supports national and international research collaboration is a key contributor to Australia's university rankings and a major drawcard for international talent, both staff and students. International education is Australia's third largest export industry, valued at \$20 billion annually. Maintaining Australia's position as a high quality destination, demonstrated through university rankings, is vital to supporting our strong international education industry.

### **National research infrastructure requires long-term sustainable investment**

Government has made a \$1.5 billion investment over 10 years under the National Collaborative Research Infrastructure Strategy (NCRIS). This is welcome. However, as this is operational funding only, the issue of capital funding for national and landmark research infrastructure remains unresolved.

While it is encouraging that Government wants to develop a plan for investment over the next decade, UA is concerned about the opportunities being lost with the announcement regarding the closure of the \$3.7 billion Education Investment Fund (EIF) in the 2016-17 Mid-year Economic and Fiscal Outlook. Removal of the EIF would be a body blow to the ability of Government, universities and industry to invest in education and research.

*The Research Infrastructure Review Final Report* (September 2015), commissioned by the Commonwealth Government and led by Mr Philip Clark AM, made specific recommendations in



relation to securing a long-term Government funding program for research infrastructure. Such a program, supported by a strategic Roadmap for national research infrastructure, would not only drive more effective and efficient allocation of available funding, but also leverage significant co-investment opportunities.

Governments need to provide the patient capital to make the long-term investment in research infrastructure to create an environment for the inspired risk taking that is essential to technological discovery and so support a system in which innovative industry can flourish.

*(Research Infrastructure Review Final Report, p.18)*

UA urges Government to implement long-term, strategic, predictable funding for research infrastructure. Funding uncertainty is a major threat to Australian research endeavours, with flow-on consequences for innovation, industry and our international competitiveness.

### **Prioritising Investment**

UA notes the nine focus areas to address future infrastructure needs and defers to the expertise within individual disciplines and industries to provide feedback on the merits of each focus area.

However, it is critical that in prioritising investment, facilities are viewed as part of a strategic, well designed, integrated system, not just stand-alone investments. NCRIS investment has been a good model, creating a national network of research infrastructure. We need to build on the positive aspects of this model. Identifying investment priorities needs a whole-of-system view rather than a competitive view. A collaborative approach will allow a national system based on strategic priorities as well as the most effective use of funds.

### **National Research Infrastructure Framework**

UA supports the Framework and the individual elements relating to industry engagement, governance, skills and career development, international engagement and access.

#### Strategic Governance

UA strongly supports the recommendation to establish a Research Infrastructure National Advisory Group. It is critical that Government receives independent advice from experts. Importantly, this advice will need to balance recommendations regarding supporting current infrastructure and developing new initiatives, as well as having a respected process for recommendations regarding decommissioning of facilities.

#### Skilled Workforce

UA welcomes the recommendations relating to a skilled workforce, in terms of supporting training and career development both within national or landmark facilities and universities.

While it is agreed that skills development and training of facility managers and technical staff, and researchers themselves are critical to the productive use of national infrastructure, as UA highlighted in previous consultations on the roadmap, it is important that these are treated as distinct policy issues.



As the draft roadmap acknowledges, while there are deficits in particular research capabilities, including data analysis and software development, there is a limit “to the extent that the skills gaps can be addressed by facilities”.

It is important that governments, industry and the research community respond to these issues in the context of the Australian Council of Learned Academies (ACOLA) Review of Australia’s Research training system. As previously noted by UA, reforms to the Research Block Grants will also be an essential part of building Australia’s research skills base.

#### Access to Research Infrastructure

UA welcomes a principles-based approach to access to national research infrastructure and supports the premise that all researchers should be able to access national research infrastructure, including landmark facilities, with priority provided to meritorious research.

It is critical in applying this principle and in considering the three broad categories of research as outlined in the draft roadmap, that access for meritorious research is not diminished by commercial considerations and the ability of users to pay.

UA applauds the Roadmap’s recognition that in some cases it is preferable to fund Australian researchers to access international facilities rather than replicate major pieces of infrastructure here.

#### **Implementation of the Roadmap**

The implementation process will be critical to ensuring the sustainability of Australia’s research infrastructure system. It is encouraging to note the facilitation process may consider a number of capability areas in parallel as part of moving towards even better integration of the system.

It is equally important that the funding process and allocations allows the flexibility to ensure a system wide approach.

UA would be very interested in the final detail of the implementation process, including timeframes and outcomes of the facilitation process, once this becomes available.

