



Charles Sturt
University

Submission to the Review of the Australian Research Council Act 2001

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Office of the Vice-Chancellor
Charles Sturt University

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Response to consultation questions

1. How could the purpose in the ARC Act be revised to reflect the current and future role of the ARC?

Many of the goals behind establishing the ARC as an independent statutory authority have not been met. At the time the ARC was set up there were aspirations for larger grants covering more of the actual costs of research, for higher success rates, and for more secure research careers. There were also statements that as a statutory authority the ARC would be free from political interference. The reality has been very different.

The answer is not necessarily more funding: these goals were not met even as funding for the ARC increased under the *Backing Australia's Ability* and *Backing Australia's Future* initiatives.

There are many reasons why the ARC may not have achieved the original vision, but at core they all come down to continual tweaking: new and more narrowly targeted programs, efficiency dividends, citizen advisory panels, new responsibilities like ERA and EI, the flow-on effect of changes to the legislation and regulations governing the use of public funds, the loss of the Board. Some of these changes were necessary and well-justified. Some were not.

This review offers an opportunity to reset the ARC, to take steps toward it becoming an exemplary research funding agency and the driver of a renaissance in Australian research.

As a first step, the ARC Act should be amended to emphasise its focus on fundamental research across a range of disciplines (excluding those under the remit of the NHMRC). This could include a broad requirement for the ARC to align with the research priorities of the government without tying the ARC and its funding programs to specific policy goals (e.g. commercialisation, preferencing research in some fields over others on the basis of perceived need or economic value).

The provisions for the ARC and its CEO to 'provide advice to the Minister about matters related to research' should be removed as they have never been exercised. Since the ARC was established, successive governments have relied on other bodies to provide this kind of advice (e.g. the National Science and Technology Council, the erstwhile Prime Minister's Science, Engineering and Innovation Council, Innovation and Science Australia). The removal of these provisions would serve to reinforce that the ARC is, primarily, a funding body.

The Act could include a clearer definition of the ARC's scope so as to deal with overlap with the NHMRC, DSTO and other Australian Government research funding bodies. On this issue, an overarching body with responsibility for monitoring all Australian Government research programs could be useful and provide the kind of policy and strategic advice originally envisaged as being part of the ARC's role.

The Act could also be clearer on issues such as:

- what data the ARC collects about research and what it is used for,
- the frequency of reviews of the ARC and its operations, and
- international benchmarking of Australia research, but also of the ARC itself.

Above all a refreshed ARC Act must emphasise the primacy of expert advice in funding decisions, and the ARC's independence from government. Ideally the latter would be reinforced by changes to the ARC's governance, set out in legislation (see below).

2. Do you consider the current ARC governance model is adequate for the ARC to perform its functions?

No. Charles Sturt University recommends restoring the ARC Board with appropriate academic, community and industry membership reflecting the breadth of Australia's research system – including, particularly, representation from regional and less research-intensive universities.

The Act should include provisions for appointments to the Board that minimise the possibility of appointments on the basis of political favour, with fixed terms, clear criteria for removal and *pro tem* appointments, and some guidance on the characteristics required for appointment to the Board. This might include a provision for the Minister with responsibility for the ARC to seek advice from other Ministers and from higher education and research peak bodies on Board appointments.

The ARC Board would be responsible for making recommendations to the Minister on *inter alia* the appointment of the CEO.

Charles Sturt University supports the appointment of non-academics to the Board, ideally representing a range of 'research end users' rather than industry or for-profit enterprises. While such representatives could have a role in evaluating the impact of ARC funded research, they should not have a role in assessing grants or selecting projects to be funded, as this is not in keeping with international practice and would undermine the ARC's focus on broad-based fundamental research.

3. How could the Act be improved to ensure academic and research expertise is obtained and maintained to support the ARC? How could this be done without the Act becoming overly prescriptive?

Charles Sturt University suggests that the Act could be amended to require the ARC to establish and use, for grant assessments and other purposes, a College of Experts. The Act could specify some basic criteria for appointment to the College, including:

- a background in research,
- a spread of expertise across different disciplines,
- members from a variety of organisations, and
- members at different stages of their careers.

Like the Board the College of Experts could include research end-users, but, again, the majority of members should come from research organisations, reflecting the primary purpose of the ARC.

4. Should the ARC Act be amended to consolidate the pre-eminence or importance of peer review?

Not as such. Charles Sturt University suggests that Act could emphasise the importance of peer review without making it pre-eminent. For example, the Act could be amended to require the ARC to use peer review mainly when it is cost-effective to do so – perhaps for major (i.e. large value) programs such as Centres of Excellence or Future Fellowships. There should be scope for the ARC to use other less-resource intensive and/or more innovative means for assessing funding applications, provided academic rigour and excellence remain at the core of any process.

The review of the ARC Act and the development of the Universities Accord offer an opportunity to explore alternative models for funding research, including new approaches to peer review that are less burdensome for the reviewers and less likely to delay funding decisions. Trialling alternative approaches to grant assessment is, however, best addressed in the Minister's letter of expectations or in program guidelines, rather than in the legislation.

Ideally, the Act and any associated non-legislative instruments should consolidate the pre-eminence of independent, expert advice in funding recommendations.

5. Please provide suggestions on how the ARC, researchers and universities can better preserve and strengthen the social licence for public funding of research?

Notwithstanding recent changes and the apparent strong support for the National Interest Test (NIT) in the Government and Opposition, Charles Sturt University recommends that the NIT should be abolished. The NIT adds no value to a robust and independent grant assessment process. It was introduced for political reasons, and in response to pressure from long-standing critics in the media and politics rather than to improve the quality of outcomes. As a recent initiative it can be dropped without significant administrative or other complications for the ARC and universities.

The national interest, broadly understood and not limited to saving the Minister and Government from having to answer pointed questions from unsatisfiable critics, is best served by supporting high quality, innovative and creative research in a range of fields, with funding decisions informed by expert advice and with reference to government priorities and national needs. The nation's interests are not served by funding processes affected by administrative delays and political whims.

There is value, however, in encouraging researchers to provide plain English summaries of their proposals – while recognising the need for the use of technical language in some cases. The summaries could be used to preserve and strengthen the social license for public funding for all forms of research – for example in material provided to the media, in reporting to the Minister and Parliament, in public events such as showcases, and other outlets.

6. What elements of ARC processes or practices create administrative burdens and/or duplication of effort for researchers, research offices and research partners?

Charles Sturt University has successfully competed for funding from other Australian Government research programs that provide high-value grants for high impact projects, awarded on the basis of far less burdensome application, assessment and reporting requirements than those used by the ARC. Many other Australian Government research funding programs also use forms of peer review and are required to meet the same basic legislative and regulatory requirements for the use of public funds as the ARC. By implication the additional requirements imposed by the ARC must be either a consequence of its Act, internal administrative practices accumulated over more than 20 years without a review, or both.

A key goal for the review of the Act might be to ensure that ARC grant administration is designed to meet basic legislative and regulatory requirements for the use of public funds, any other requirements that might be needed for research grants (alignment with national security, ethics, and safety codes, guidelines and legislation, for example), and essential reporting to the Minister, Parliament, and regulatory or oversight bodies. This would need to be effected in parallel with any changes to ARC grant programs resulting from the review.

Ethics approvals are essential for good-quality research with strong community and political research, and there is scope to develop a common ethics risk assessment and reporting framework to be shared with the NHRMC and other Australian Government research and research funding bodies (including Departments with research grants programs).

While this may be outside the scope of the Act and this review, there is potential for the ARC to play an important role in developing and promulgating best practice models for grant administration, to help with reducing the burden for researchers, research offices and research partners – especially in the wake of any reforms to the ARC and its operations that may result from the review, and ideally in concert with the implementation of the Universities Accord.

7. What improvements could be made:

- a. to ARC processes to promote excellence, improve agility, and better facilitate globally collaborative research and partnerships while maintaining rigour, excellence and peer review at an international standard?**

At present the Act does not require the ARC to take into consideration global standards or benchmarks for peer review, research or impact assessment, collaboration and partnerships, or even the administration of grant programs. A small amendment to the Act would ensure that the ARC does so in future and carry more weight than a provision in the Minister's Letter of Expectations.

An international benchmarking exercise by the ARC could also be useful for other Australian Government research funding programs, and support the development of innovative, more cost-effective and less burdensome processes. For example, there are experiments under way in Europe and North America with grant programs that assess applications based on potential rather than track record, and even, in a few limited instances, based on lotteries or other random allocation models. These and similar models could be trialled in Australia on a limited basis. Grants based on potential would be especially beneficial to postdocs and other early career researchers who may not yet be at the stage to compete for ARC and other grants.

They could be awarded using rigorous, high-standard processes not involving peer review, and for varying amounts and durations. More flexible models would also support quick response to emerging national or international opportunities or challenges.

At the other end of the scale there is considerable merit to exploring the use of multi-stage processes, such as an Expression of Interest phase, for large or long duration grants such as Centres of Excellence and Future or Laureate Fellowships. Ideally these would involve fast assessment, decision, and notification approach in the early stages.

a. to the ARC Act to give effect to these process improvements, or do you suggest other means?

Charles Sturt University suggests the review could explore changes to ARC grant programs (including the introduction of a new program) focused directly on supporting bi-lateral and multi-lateral research programs with international partners. This could encompass formal collaborations with research funding bodies in Europe, the UK, North America, and Asia (with sanction for the ARC to do so written into the Act), as well as programs to support researcher-to-researcher or university-to-university collaborations. In addition to building international research collaboration, these kinds of programs would also provide an opportunity for Australian researchers and the ARC to learn from international models for grant allocation and administration, research assessment and evaluation, and other practices.

Charles Sturt University also believes there is an urgent need for the ARC and other Australian Government research funding bodies to give careful consideration to how First Nations knowledge is used in grant applications, research evaluation, and public reporting.

8. With respect to ERA and EI:

a. Do you believe there is a need for a highly rigorous, retrospective excellence and impact assessment exercise, particularly in the absence of a link to funding?’

There is a need for a regular, rigorous and retrospective assessment of excellence and impact for all Australian Government funded research, not just that funded by the ARC, NHMRC and the Department of Education, and not just research conducted in universities.

Periodic evaluations would ensure that the Australian Government and the wider community can be confident the \$11 billion plus of annual public investment in research is supporting high-quality research and research infrastructure, building capability, meeting national needs and priorities, and providing clear social, economic, cultural, and environmental benefits.

Research assessment on this scale would be beyond the resources of the ARC alone. It would be an appropriate task for the kind of overarching body suggested above (in response to Question 1). As a large-scale exercise it would need to be conducted less often, could be developed with the goal of having some influence on future funding decisions (and, possibly, research policies and priorities), and provide a way to regularly evaluate the performance and effectiveness of funding bodies like the ARC.

In relation to the Act, Charles Sturt University recognises that there would be some value in amending the legislation to include a reference to research quality, engagement and impact (the latter broadly defined) as core goals of the ARC, without specifying how they might be assessed.

Evaluations of research excellence and impact also have an important role in setting standards for the higher education sector. All higher education providers wishing to receive accreditation or continue to be accredited as a university must meet specific and rigorous requirements in relation to quality of research. There needs to be a mechanism by which universities can be assessed against such criteria. The less rigorous such an assessment is, the greater the likelihood of an incorrect accreditation decision. Even in the case of no explicit link to funding, there may be several second order effects with financial impact. A transition to a prospective approach may not fully be able to reflect future organizational objectives and strategies of current Australian universities – particularly for those universities whose continuing existence necessitates such changes in strategy.

Beyond accreditation as universities, it is important to understand the depth, quality and gaps in research produced in Australian universities. A rigorous exercise in research assessment and impact assessment in the absence of a direct link to funding is needed to inform governments, stakeholders and universities of the quality of their research outputs and associated impacts. This is particularly important if the post-review purpose of the ARC will align closely with its purpose as defined in the ARC Strategy 2022 – 2025, which is to ‘help shape Australian research system for the benefit of the nation ...’ where shaping the research landscape includes ‘demonstrating academic excellence and leadership’ and ‘providing national leadership and evaluation in areas of research policy that impact on the quality and integrity of research in Australian universities’.

Providing leadership in shaping the Australian research eco-system for the benefit of the nation should include an exercise in evaluating excellence and identifying strengths and areas of weakness and guiding university research toward global best practice, rather than informing transient ministerial decisions on funding allocations.

b. What other evaluation measures or approaches (e.g. data driven approaches) could be deployed to inform research standards and future academic capability that are relevant to all disciplines, without increasing the administrative burden?

Evaluations of academic human capital in the areas of entrepreneurship, communication, engagement and knowledge transfer could be a useful measure to understand the capacity and capability of the academy to translate research into government, stakeholder and community priorities. This may not be relevant or appropriate for every researcher in every discipline, but it could evaluate the depth of capability across disciplines to identify best practice to be shared across research disciplines and to foster inter-disciplinary learning.

c. Should the ARC Act be amended to reference a research quality, engagement and impact assessment function, however conducted?

The ARC has increasingly been asked to conduct evaluation exercises at ministerial discretion. Should this be an ongoing expectation with which Australian universities need to comply, this should be formally captured within the ARC Act. It is vitally important for the ARC to continue to operate in a consistent, objective and transparent way independent of the current government. Having key functions of the ARC being undertaken at ministerial discretion undermines such independence and consistency.

d. If so, should that reference include the function of developing new methods in research assessment and keeping up with best practice and global insights?

Yes. The ARC should be expected to conduct such assessment and evaluation exercises in the most efficient and optimal ways. This necessitates a need to develop new and/or refine existing methodologies. This includes the refinement of any international best practice methodologies to the Australian research environment.

Ideally, the act should reference that development of new methods in research assessment should be in collaboration with university stakeholders. The ARC should consider its role to empower Australian universities, rather than to inform universities of research assessment methods.

9. With respect to the ARC’s capability to evaluate research excellence and impact:

a. how can the ARC best use its expertise and capability in evaluating the outcomes and benefits of research to demonstrate the ongoing value and excellence of Australian research in different disciplines and/or in response to perceived problems?

Charles Sturt University suggests that the ARC can best use its expertise and capability in evaluating research outcomes and benefits by making it available across government, and potentially to industry and other end users. Broader use would support better understanding of the challenges around research funding and evaluation, reinforce the need for and value of public and private investment in research, and strengthen the social licence for public funding of research.

The evaluation of projects funded by the ARC should be carried out with a degree of independence in the evaluation methodology.

Building a portfolio of research evaluation studies, sharing capability, best practice and learnings across industry developed through this process and building the profile of Australian research for government and other stakeholders is a worthwhile venture, so long as it is completed with integrity and transparency.

b. what elements would be important so that such a capability could inform potential collaborators and end-users, share best practice, and identify national gaps and opportunities?

Charles Sturt University suggests publicly available and searchable data sets, case studies, publications repositories and other information sources would be a valuable resource for potential collaborators and end-users, as well as supporting systemic analyses, strategic planning, and benchmarking.

Regardless of any specific data-driven methodology selected, it is important that there is greater granularity of the data and transparency provided in the form of the assessment process and outcomes, and institutional discipline profiles. This contextual information is critical in providing universities with insights into the specific areas in which they need to improve within the discipline areas they are assessed. This will also provide stakeholders and end-users of ERA assessment outcomes with a more accurate view of research at a given higher education provider and allow fairer comparisons between universities researching in similar areas but with different operating environments such as student population, staffing demographics, interdisciplinary profiles and geographic location.

Development of national research impact standards could be useful, potentially by discipline. Informed from ARC evaluation activities, these could guide universities, end users and collaborators of what research impact best practice looks like and provide a framework for researchers and their university support systems to work towards. Impact standards could provide a useful way for measuring university research impact, beyond case studies.

Standards for impact measurement and management are appearing in other contexts. For example, the United Nations has developed standards for enterprises (one example among other types of organisations) to integrate managing impact to optimise contribution to the UN Sustainable Development Goals. While these are concerned with impact investment and capital allocation, they also “provide private enterprises with a common language and approach to fully integrate the SDGs into all business and investment decision-making processes, in line with existing principles and leveraging available tools and frameworks. The Standards aim to help shift enterprises from SDG alignment to SDG action.”

Development of university research engagement and impact standards, for universities to adhere to and aspire to, could be useful for end-users and government to understand best practice across the sector and provide universities with a framework to identify gaps and opportunities.

c. would a data-driven methodology assist in fulfilling this purpose?

A data-driven methodology may assist in fulfilling such purposes. Should such an approach be implemented, it is important that it is transparent (not a “black box”) and that universities are able to access the data and understand the modelling used that result in such assessments of excellence and impact. This includes being able to request corrections where underlying data is objectively incorrect based on external evidence.

There should also be consideration made for leveraging the data collected and evaluated to provide greater visibility of Australian research, highlighting our collective strengths, and encouraging opportunities for collaboration both nationally and internationally in areas of research focus. This could be achieved through making metadata collected publicly available, increasing transparency around researcher demographics, First Nations representation, and support discoverability of open access research by synthesising this information into one location.

While data would play an important role in future research quality evaluations (and possibly some funding decisions), it would be equally important to ensure that the ARC, other funding bodies, and other Australian Government, private sector and community bodies with an interest in research take into account the full

range of contemporary research outputs: peer reviewed publications, grey literature, commissioned reports including consultancies, data sets, digital media, and other non-traditional outputs.

10. Having regard to the Review's Terms of Reference, the ARC Act itself, the function, structure and operation of the ARC, and the current and potential role of the ARC in fostering excellent Australian research of global significance, do you have any other comments or suggestions?

Charles Sturt University suggests that there are several changes to the function, structure and operation of the ARC that would enhance its role in fostering excellent Australian research while ensuring that research is high quality and leads to demonstrable impact in a range of domains.

As set out above, these changes are:

- strengthening the independence of the ARC,
- restoring the Board,
- removing the NIT,
- exploring alternative models for assessing applications and funding research,
- simplified administrative processes,
- international benchmarking, including of grant assessment and administration,
- providing leadership in research evaluation and shaping the national research system, and
- widening the scope of future research evaluation exercises to include all research funded by the Australian Government.