

## Australian Research Council Consultation: Excellence in Research for Australia Benchmarking and Rating Scale

**22 April 2022**

Science & Technology Australia acknowledges the recent comprehensive program of work to review the Excellence in Research for Australia (ERA) and Engagement and Impact (EI) processes.

STA is the peak body representing more than 90,000 scientists and technologists in Australia. Many of them work in the nation's research system and are some of our nation's brightest research stars.

We thank the Australian Research Council for this opportunity to offer input on the broad themes in the [ERA 2023 Benchmarking and Rating Scale consultation paper](#).

### Context for this consultation

The Excellence in Research for Australia benchmarking process was created as Australia's national research evaluation framework in 2010.

Its stated purpose and clear intent is "to promote research excellence" in Australia and "[help promote Australia's research strengths on the world stage](#)".

As the ARC notes, the objectives of ERA are:

- Promoting Excellence: Rigorously assess research quality to promote pursuit of excellence across all fields and all types of research.
- Informing Decisions: Provide a rich and robust source of information on university research excellence and activity to inform and support the needs of university, industry, government and community stakeholders.
- Demonstrating Quality: Provide government and the public with evidence of the quality of research produced by Australia's universities.
- Enabling Comparisons: Allow for comparisons between Australian universities and against world standard for all discipline areas.

The first full ERA process ran in 2010 (published in early 2011). Three subsequent rounds of ERA assessments were run in 2012, 2015 and 2018.

The ARC undertook a comprehensive review of ERA (and its companion exercise the Engagement and Impact Assessment) in 2020–21 – [ERA EI Review Final Report 2020–2021](#).

In a Letter of Expectations to the CEO of the Australian Research Council of December 2021, Acting Education Minister Stuart Robert asked the ARC to expedite work arising from that review, "including

fast-tracking development of more efficient and robust assessments of the quality and impact of Australian research". He elaborated:

*"To be effective, the performance information generated by the ERA and EI assessments must drive the quest for excellence. In advance of the next ERA, I ask the ARC to convene the expert working group proposed by the Review to develop a revised ERA rating scale. The new scale should embed an approach that sets the 'world standard' benchmark against those nations and universities that are at the forefront of research. The new scale should provide a comparator that will set a rising standard over time. While acknowledging the complexity of the assessment process, I expect that the results will be underpinned by a benchmarking structure that is clear in its ambition and provides granular and meaningful reporting of the level of achievement across different universities."*

## How to pursue further excellence without 'marking ourselves down'

Science & Technology Australia shares the Australian Government's strong desire to continue to extend Australia's excellence in our national research performance. As Australia's Chief Scientist Dr Cathy Foley often notes: "[research is our superpower](#)" – and the source of our future national income.

Hearteningly, the 2018 ERA benchmarking confirmed [more than 90 per cent of Australian university research assessed was at, or above, world standard](#).

This powerful statistic highlights the quality and strength of Australian research. It is a compelling 'proof point' that helps Australia to attract the world's best and brightest global researchers and international students to bring their skills, smarts and funds to our country.

**In considering any changes to the global benchmarks against which we measure our research excellence, Australia must be incredibly careful not to talk ourselves down on the world stage. This is crucial for Australia's economic strength, national income and Australian job creation including in our local manufacturing industry.**

**We must always remember that the goal of benchmarking the quality of Australia's research is to "[help promote Australia's research strengths on the world stage](#)".**

Science & Technology Australia understands the Government's intent in asking the ARC to develop a revised ratings scale is to seek greater granularity at the upper end of the scale. This seeks to create greater differentiation between the very top performers in Australian research to spur further excellence.

**However, great care needs to be taken to avoid damaging Australia's strong reputation for the overall excellence of our research performance, which is a key national asset – especially in fields where we will likely compete with rising global powers in science and technology for the world's top talent and technology.**

**It would not advance Australia's national interest for a revised rating scale to open the door to our global competitors stealing a march on Australia or talking down our strengths compared to theirs in the fierce global contest for talent, research stars and industry R&D investment.**

A shift to a system that stretches out the top performers could produce results that effectively undersell Australia's high-quality research sector.

**The consultation paper notes that under the new scale, very few institutions could expect to receive the top tier 'world leading' or 'AAA' rating. Although this would be purely due to the mechanics of the new ratings, there is a risk it could be interpreted as an apparent (but not real) decline in the quality of Australian research over time.**

**For a sector that has led the nation through the pandemic, and consistently produced stellar research in support of the nation, this would be a devastating unintended consequence.**

**This would be at odds with the ERA objectives of promoting excellence and demonstrating the quality and value of Australian research.**

While it is important that the ERA process is a spur to further excellence, it is important to safeguard our nation's reputation for the world-class quality of Australian research.

It would also be wise to preserve some comparability with the ratings used in previous ERA rounds to enable Australia to track national research performance over time.

**To meet these imperatives, Science & Technology Australia strongly recommends the merits of Option A over Option B to ensure closer comparability to the current rating scale terms, while meeting the Government's objectives for greater granularity at the top of the scale.**

**We also strongly advocate retaining the use of the benchmarking term 'world standard' rather than 'world average' – noting it is a stronger and more positive term that relays the strengths of Australia's reputation.**

ERA imposes significant administrative and resourcing costs upon both the university sector and the ARC. Any changes should be implemented in a way that minimises these burdens.

### **Further responses to the specific consultation paper questions:**

- Ensuring the ERA process is fit-for-purpose and remains a useful tool for assessing research excellence and enabling realistic global comparisons, research funding formulas should always remain strictly independent of the ERA processes.
- Identifying the 'high performance indicator' as the top 10 per cent of institutions for any given discipline has merit and Science & Technology Australia appreciates the reasoning behind the move towards a more granular 'top end' of the rating scale. However, the top 10 per cent is a very high bar, given that this will still be considered to be 'clearly below' the 'world leading' standard. An alternative may be to consider benchmarking in the top 20 per cent globally.
- Some disciplines have much higher operating costs than others. It should be acknowledged that this may affect a university's ability to invest in these disciplines to the degree necessary to achieve a top rating (world leading) in the relevant Unit of Evaluation (UoE). This should not prevent a university from pursuing research in that discipline, but there may be an unintended consequence of a lower ERA rating creating the impression that the university is underperforming when it is early in the process of building capability in a field.
- It's unclear how either of the proposed new rating scales would acknowledge research excellence in sub-fields within a UoE. For example, Australian universities support the world's best southern hemisphere climate scientists, and experts in Australian fauna and flora, yet excellence in these areas may not be so readily recognised on a global scale. Although the rating scale matrix outlining the various 'characteristics' of each rating notes that the highest ratings will apply to research 'regardless of whether its substantive focus or publication venues are national or international' it's not immediately obvious how the citation analyses will account for this specificity of focus.
- Science & Technology Australia strongly commends the development of specific guidance for assessors to evaluate research excellence in Indigenous studies. This guidance should be co-designed with Aboriginal and Torres Strait Islander research leaders and experts.

Once again, we thank the Australian Research Council for this opportunity to provide input. Please do not hesitate to contact us if we can assist as you consider the next steps in this process.

Yours faithfully,

Professor Mark Hutchinson  
President, Science & Technology Australia

Misha Schubert  
CEO, Science & Technology Australia