

POLICY SUBMISSION

11 APRIL 2025

AUSTRALIAN RESEARCH COUNCIL NATIONAL COMPETITIVE GRANTS PROGRAM POLICY REVIEW

Science & Technology Australia (STA) thanks the Australian Research Council (ARC) for the opportunity to respond to the National Competitive Grants Program Policy (NCGP) Review. STA is the peak body for the nation's science and technology sectors, representing more than 145 member organisations and their over 235,000 scientists, STEM educators, engineers and technologists. We connect science and technology with governments, business and the community to advance science's role in solving some of humanity's greatest challenges.

Key points

- STA commends the ARC Board's intention to cement the ARC's role to support discovery research but cautions against the potential loss of support for crucial collaborative work.
- The NCGP is tightly interconnected with other funding streams supporting university research – changes to the NCGP must consider ripple effects across the system and how these might impact the ultimate efficacy of the changes and/or distort their intent.
- There is a need for clear communications that shows line of sight from NCGP to the ARC organisational strategy and legislation.
- While the proposed new schemes would deliver more grants and support more researchers, ultimately this spreads the current constrained funding pool more thinly. Combined with short timeframes for Initiate grants and embedded fellowships, this could perpetuate precarity in research careers.
- Streamlining all grants into the six streams could also jeopardise crucial support for research infrastructure, and collaborative work.
- Streamlining the NCGP and reducing researchers' and university research offices' administrative burden is a worthy goal, but it is unclear if the shift to the new schemes will actually do this, given the significantly larger number of grants that are intended to be awarded annually.
- STA commends the proposed Realise Indigenous Capability scheme, but there is more the ARC could do towards the legislated objective of 'expanding Indigenous knowledge systems', including weaving Indigenous supports through all schemes.

Does the proposed model provide a strong and clear basis for the NCGP over the next 20 years?

The [Australian Research Council Amendment \(Review Response\) Act 2024](#), (the Act) Section 3 (a) – (h) lays out the objectives for the ARC with the NCGP being instrumental in achieving (a), (b), (ba), (d), (e), and (f).

While the proposed model does offer some support for academic career pathways, it is unclear if the new schemes' structures will be sufficient to deliver certainty, security and recognition for the research workforce. The removal DECRA and Future Fellowships from the funding landscape will potentially limit opportunities available to early- and mid-career researchers (EMCRs) who are looking to establish independent careers. While the proposed schemes do allow for EMCRs to include their salary in the project budget, this will dramatically increase the cost of a proposed project. An unintended consequence could be that, to stretch the finite amount of total funding available, the process may favour applications with lower project budgets, i.e. those that do not include salary. As such, it will be critical that project cost is not considered in grant approval considerations.

While it might be argued that it is not the NCGP's role to support academic careers, the Act is clear that the ARC's objectives include "foster the Australian research landscape and community, including by supporting academic career pathways... and... support Australian universities to attract and retain academic researchers and promote quality academic jobs". While the proposed system of funding salary through project budgets does still include some support for researchers' careers, it lacks the clarity of clearly supporting salary costs through a fellowship. This also loses the recognition or prestige that the Fellowships currently carry.

If the ARC Board's strong perspective is that these objectives in the Act should be met without delivering support for researcher salaries – and that this role/responsibility should be fulfilled by universities – this needs to be clearly articulated and made clear to the sector, as it will require a significant shift in university practice. At the same time, continuing to offer salary support through project budgets, as well as embedded fellowships, confuses the intent and detracts from this goal. In 2024, around one third of the total funding awarded through the NCGP potentially went towards salary support through DECRA, Future Fellowships, Laureate Fellowships and DAATSIAs¹. For clarity, and to truly contribute towards a goal of simplifying the NCGP, the proposed new schemes could be completely dedicated to project costs only – but this would need to be accompanied by a significant boost to the Research Support Program (RSP) by Government to ensure the overall system can still support researchers' salaries.

Science & Technology Australia Recommendation

The ARC should give due consideration to the role of the NCGP in the context of other Government support for the research workforce, and clearly articulate the level of responsibility the NCGP should take in adequately supporting Australia's research workforce.

1. Does the proposed model adequately address your concerns or those expressed in the initial consultations?

STA has consistently advocated for the ARC's NCGP to be definitive in its role supporting discovery research, and is pleased to see the proposal's intent to cement that purpose.

STA has also called for the ARC to develop a clear strategy document outlining the agency's goals, as aligned with the objectives in the Act. This reshaping of the NCGP is the clearest opportunity to deliver this. This strategy is needed to provide a clear line of sight to how the schemes work together to help the sector understand the rationale behind the changes, as well as monitor and evaluate their impact.

Science & Technology Australia Recommendation

The ARC should develop a clear strategy document for the agency, with clear strategic goals aligned to the objectives laid out in the [Australian Research Council Amendment \(Review Response\) Act 2024](#), and clear line of sight to how the new NCGP will fulfil the strategic goals.

2. Do you foresee any unintended consequences or significant risks which have not been accounted for in the proposed model?

While the goal to fund excellent projects, rather than people, is indeed worthy, it could run the risk of Australia's research system losing excellent people. Removing the dedicated fellowship programs risks losing critical support for EMCRs within the system. While STA notes the ARC Board's perspective that the NCGP should not be responsible for supporting research careers, as noted above, supporting *research pathways* is one of the objectives included in the Act. Further, the university research funding system is complex and comprised of several interconnected funding streams. Implementing the proposed significant changes without due consideration to how they will affect other parts of the research system, or making compensatory/complementary changes elsewhere, could be detrimental to Australia's research capability. For example, while the embedded fellowships will offer a useful option for researchers needing to support their salary costs, two years will almost always be insufficient to support them for the project duration. If the expectation is that universities will automatically cover the salary costs for the remainder of the project, this will require a significant uplift to the total quantum of RSP funds to avoid wider (presumably unintended) ramifications in the university system.

To achieve the goal of supporting more 'high-risk, greater potential reward' research, there must be a corresponding and substantial shift in peer reviewers' mindset. Without clear and transparent assessment criteria and processes, there is a risk that innovative thinking and ideas will not be rewarded.

STA welcomes the potential nearly doubling of grants offered through the new schemesⁱⁱ as this will enable the NCGP to support a broader range of research and researchers. However, combined with the additional processes for embedded fellowships, this will place a significant administrative burden on researchers, the ARC, assessors and university research offices. Further, while an increased number of grants enables the NCGP to support more researchers across the sector, without a corresponding increase in total NCGP budget this means the available funding will be spread more thinly. The combined effect will be a reduction in support, workforce security and capability for Australian research.

As stated in the discussion paper, shifting to the six new schemes removes the delineation between the Discovery and Linkage programs. While this supports the ARC Board's stated goal of cementing the NCGP's role in supporting discovery research, it may run the risk of 'throwing the baby out with the bathwater'. Projects that are crucial to Australia's research capability currently supported through the current Linkage schemes have different goals, requirements and measures of success. Attempting to deliver discovery and applied research through the same schemes could present challenges in developing sensible guidelines, project assessment, management and reporting.

Science & Technology Australia Recommendation

The ARC should conduct and publish modelling and analysis that assesses:

- the level of administrative burden the proposed new schemes will impose upon researchers, university research offices, peer-review assessors, and the ARC, and consider ways to minimise this
- the impact of removing dedicated fellowship programs from the NCGP, and how this may – or may not – be compensated for through other components of university research funding
- the feasibility of developing grant guidelines and assessment processes and metrics that will enable single grant schemes to effectively deliver funding for both discovery and applied research.

3. What issues would need to be addressed in the transition from the current NCGP schemes to the new model?

Regardless of the final scheme structure, the top priority for the ARC must be clear, timely and concise communication with the sector – especially regarding timelines and transition arrangements.

It's also vital that researchers planning to apply for DECRA or Future Fellowships – many of whom will depend on these grants to continue in their research career – do not fall through the gaps during the transition. This might require running current fellowship schemes for an additional year – perhaps concurrently with Initiate and Breakthrough – as the sector recalibrates and understands how the new schemes will operate in practice. Similarly, removing Laureate Fellowships may run the risk of losing what can be a prestigious drawcard to retain excellent senior researchers in Australia, or attract the best talent from overseas.

Ensuring open and transparent lines of communication and accepting feedback will also be essential. Given the deep and potentially transformative level of change the proposed system would implement, the consultation time between the discussion paper's release and submissions closing has been limited, and the maximum of 4 pages for written submissions is restrictive. We welcome the chance for further discussion on the model.

As discussed in more detail below, some of the proposed changes will require significant shifts in assessment processes and potentially attitudes of the College of Experts members and other peer reviewers. Shifting the culture of research assessment from the current emphasis on publications and traditional research outputs is challengingⁱⁱⁱ – but will be necessary to meet the intent of the proposed changes. The ARC will need to deliver training or detailed briefing/instructions to all assessors, as well as develop clear and transparent grant guidelines that articulate the new schemes' intent, and measures of success. In some cases, these measures of success should include non-traditional research outcomes, such as patents or other IP metrics, contracts to deliver research services, production metrics, validated procedures or methods and impact case studies.

Science & Technology Australia Recommendation

The ARC should ensure clear and open communication with the sector, including avenues for the sector to deliver feedback and input.

The ARC must consult with the sector in drafting new grant guidelines to ensure they clearly outline assessment criteria and metrics, and ensure assessors are sufficiently briefed to make fair and transparent judgements.

4. Are there any features that you would add to, or remove from, the model?

It is unclear if the embedded fellowships are a useful addition to the system, or just create confusion, additional administrative burden, and perpetuate the precarious nature of many researchers' employment. Researchers already holding ongoing positions should not be eligible for full fellowships, but could perhaps apply for part funding that would be directed to the university to cover the costs of that researcher's teaching load,



allowing the researcher to focus purely on their research. However, care must be taken that this does not simply contribute to a proliferation of short-term teaching contracts within an already insecure workforce.

Science & Technology Australia Recommendation

The NCGP guidelines must clearly articulate how researcher salaries will, or will not, be supported, and if embedded fellowships will improve the system. If applicants already hold an ongoing position in a university, embedded fellowships should only be able buy out the researcher's teaching load for a defined period.

5. Do you have any feedback on the proposed grant schemes and their likely effectiveness?

Initiate

STA commends the introduction of this bold scheme to support 'risky' ideas and innovative work that often need to be initially explored through a smaller-scale project than those supported by traditional ARC grant schemes. The Initiate scheme also potentially offers a sensible entry point for early-career researchers (ECRs) seeking to build their track record. STA also supports having a funding scheme with a stronger focus on the research idea rather than the applicant's track record, or evidence from preliminary results or testing to demonstrate project viability. To achieve this, assessment criteria and processes must be clearly structured so that assessors do not – subconsciously or otherwise – bias approvals towards researchers with stronger or longer track records. One way to ensure this would be for Initiate grant applications to only include a description of the project goal, method and expected outcome, and not include the applicant's details at all.

While ECRs will be able to include their salary in an Initiate grant, funding two years of salary will take a substantial portion of the maximum grant amount of \$400,000, and if significant numbers of applicants need to draw salary from the grant this could affect the maximum number of grants that can be funded from the finite funding pool. While this may be alleviated somewhat if the applicant also wins an embedded fellowship, applicants will still need to include salary in their project budget as a backup. This could advantage 'cheaper' applications that do not include salary.

It is also unclear if researchers without a current and/or ongoing university position, which are unusual for ECRs, would be eligible to apply for an Initiate grant.

Science & Technology Australia Recommendation

To ensure Initiate grants focus on bold ideas (and not applicant's track records) applications should only require details of the proposed project, not the applicant – i.e. the project goal, method and expected outcome.

Realise Indigenous Capability

Direct support for First Nations researchers is an essential component of the NCGP. The Realise Indigenous Capability scheme largely aligns with the current Discovery Indigenous scheme, which offers both salary and project funding. STA supports this scheme offering fellowship funding alongside project costs. Additionally, the indicative number of grants to be offered through Realise Indigenous Capability is around three times higher than current numbers of Discovery Indigenous grants awarded annually, and this will deliver a crucial increase in support for First Nations researchers.

However, while this support for First Nations researchers is essential, simply retaining and boosting this support should be augmented with additional work to align NCGP grants towards achieving the National Science and Research Priority of *elevating Aboriginal and Torres Strait Islanders knowledge systems*. While support for Aboriginal and Torres Strait Islander researchers is inextricably linked to this, there is scope for the ARC to do more and deliver more broad support for researchers working with First Nations communities. *Expanding Indigenous knowledge systems* is also one of the ARC's explicit objectives laid out in the Act.

This could be achieved through a dedicated funding stream, embedded through all six schemes, to help forge meaningful relationships with First Nations communities and support Indigenous-led and community-driven work. Protecting Indigenous intellectual property and developing potential business and/or employment opportunities on Country would be key considerations, as well as potentially providing a mechanism to remunerate Traditional Owners or community members for their time, knowledge or other contributions to research projects.

The application process for NCGP grant schemes could also include consideration of if and how the proposed project would include work with First Nations communities and/or First Nations knowledge systems. The ARC should also work with the ARC Indigenous Forum on ways to include more First Nations researchers in the assessment process.

Science & Technology Australia Recommendation

The ARC should establish dedicated funding, embedded through all six new schemes, to support researchers to build genuine and meaningful relationships with First Nations communities and support Indigenous-led and community-driven work.

Lead and Mentor

Actively encouraging – and rewarding through grant funding – senior researchers to mentor and nurture the next generation of research talent is an important goal. Establishing a dedicated funding scheme for this is a positive action that will help change academic culture and build research careers. It is sensible that this scheme would not provide salary for the EMCRs, but not the lead senior researcher. This scheme will need to have clear assessment guidelines that ensure applications are judged on the senior researcher's ability to support EMCRs, not solely on their research track record.

Science & Technology Australia Recommendation:

To ensure the Lead and Mentor scheme is effective in supporting EMCRs to build their careers, assessment criteria should be developed that properly assesses the lead researcher's ability to mentor and nurture EMCRs' careers.

Breakthrough

This scheme will essentially fulfil the role of the Discovery Projects (DPs) scheme, with the proposal indicating around 300 Breakthrough grants would be awarded per year. This is around one quarter less than the number of DPs awarded in 2024 (421) and only slightly more than half of the number awarded in 2025 (536). While it will be supplemented with Initiate, it is unclear whether the two schemes will together be effective in supporting



Australia's research capability. Additionally, as EMCRs will be eligible to draw salary on grants through the Breakthrough scheme, this may place additional demand on the already limited funding available. This could potentially result in fewer grants being awarded, or approved project budgets being insufficient to support the EMCR salary as well as project requirements.

Science & Technology Australia Recommendation:

The ARC should conduct detailed modelling to assess whether the Breakthrough and Initiate grant schemes will sufficiently support the research capability currently delivered through Discovery Projects grants.

Collaborate

This scheme will replace Linkage grants, and presumably also the Industry Fellowships, as well as being intended to support international collaborations and research infrastructure. This is a very broad remit, and grant guidelines and assessment criteria will need to be developed carefully so as not to bias the process towards any one of these goals, at the expense of the others.

Additionally, the indicative number of 30 Collaborate – likely awarded only in alternate years – is significantly less than the number of grants currently supported through the various Linkage schemes^{iv}. In 2024, these numbered 259, representing around one quarter of total grants, and around one third of total funding awarded. Under the new proposal, Collaborate's 30 grants represents less than 2% of the total number of potential grants. While this disparity may be artificially exaggerated by the overall higher number of grants in the new schemes, it does potentially represent a real diminishment of support collaborative projects with industry or across institutions. This would be a loss to the sector – and would work counter to the goals of the Strategic Examination of R&D, which has a strong focus on boosting industry R&D.

LIEF currently delivers critical support for institutional level research infrastructure, including enabling access to international facilities. Losing this ability to fund smaller scale research infrastructures could be detrimental to Australia's research capability. While Collaborate might offer a level of support for this, it will become harder to track – and take a strategic approach – to Australia's research infrastructure investments.

While STA commends the focus on cementing the NCGP's role in supporting discovery research, it's critical it retains a strong focus on enabling researchers to build partnerships and connections across the broader R&D and industry sectors. Again, given the interconnected nature of research funding, losing this capacity from the NCGP will likely have negative consequences in other parts of the research funding landscape.

Science & Technology Australia Recommendation:

The ARC should conduct modelling to assess if the new schemes will result in significantly decreased support for university–industry collaboration – and if so, how this can be addressed.

The ARC should assess the likely impact on research infrastructure access from the proposed change and ensure the final design continues to deliver sufficient support to Australia's research capability.

Prioritise

The Prioritise funding stream will retain the capability currently delivered through ARC Centres of Excellence to support concerted long-term research efforts in areas of comparative advantage, sovereign benefit or emerging research areas in which no one country or region has yet developed comparative advantage. Australia's primacy in quantum computing research is largely due to investments made through Centres of Excellence investments spanning more than two decades. The ARC Centre of Excellence for Centre for Quantum Computer Technology was founded in 2003, and then iterated into the Centre of Excellence Quantum Computation and Communication Technology in 2011. These were followed by Centre of Excellence for Engineered Quantum Systems in 2017, and the Centre of Excellence in Quantum Biotechnology in 2023. That early investment, followed by sustained additional support, delivered the research that placed Australia at the forefront of this field, ready to leverage the opportunity presented by emerging applications of quantum technology.

These investments were made because the research sector recognised the value of quantum research and made a strong case for the potential future value of investing in quantum research – not because quantum was a specific Government priority at the time. While STA acknowledges the importance of a national research funding agency remaining responsive to Government needs and priorities, the research sector itself is best placed to determine which emerging research areas might lead to future national benefit, and are worth deep research investments. These investments have always been made in alignment with broad Government research priorities – but just as expert peer reviewers in the research sector are best placed to assess research grant proposals, the expertise of the sector is needed in judging the most appropriate areas of emerging research for the nation to invest deeply in.

Science & Technology Australia Recommendation

The ARC should establish clear processes to support emerging research through large, long-term grants that allow for agility and responsiveness to Government priorities, yet are underpinned by the sector's expertise to identify which specific areas are most worthy of investment.

ⁱ This calculation is an approximation based on 2024 Selection Outcome Report data. It is difficult to ascertain the exact breakdown of salary costs and project costs awarded through Future Fellowships and DAATSIAs as this is not directly reported.

ⁱⁱ This calculation is based on 2024 Selection Outcome Committee report data. It does not include Collaborate or Prioritise as these will likely be awarded in alternate years. Every project in Initiate, Realise Indigenous Capability, Lead and Mentor and Breakthrough can in theory support two embedded fellowships i.e. a total of another 2540 grants. Noting that it's highly unlikely – and probably not even possible – that every grant would support two embedded fellowships, it does represent a significant additional administrative burden.

ⁱⁱⁱ See the ACOLA [Modernising Research Assessment](#) report commissioned in 2023 by the Office of the Chief Scientist.

^{iv} Linkage, ITTC, ITRH, LIEF and Industry Fellowships.

