

## ARMS' Response to the 2017 Engagement and Impact Assessment Pilot

### 1. Executive Summary

ARMS is appreciative of the opportunity to provide feedback to the Australian Research Council (ARC) regarding the '2017 Engagement and Impact Assessment Pilot' (EIAP) given a large proportion of ARMS members are based in Australian universities, being EIAP eligible higher education providers, and will be directly responsible for responding to the final national engagement and impact assessment (EI).

ARMS is supportive, in principle, of the Government's intention to evaluate how universities are translating their research into economic, social and other benefits and to encourage greater collaboration between universities, industry and other end-users of research. ARMS, with its sister society in the UK (ARMA), has arranged study tours to the UK in 2015 and 2017 around the theme of impact and engagement. These study tours have allowed ARMS members to examine first-hand the way in which UK research offices have responded to the UK impact agenda.

This response paper highlights several key issues regarding the proposed national research engagement and impact assessment, as noted by ARMS members who participated in the EIAP. These include:

- the high level of administrative reporting burden for institutions given the introduction of new engagement metrics reliant upon previously uncollected data, in addition to impact case studies;
- the need for subjective judgements in preparing engagement data given the ambiguous definition and application of the concept of an 'end-user' for reportable outputs and income data;
- impact studies which conflate institutional mechanisms with the actual impact of research, and limited reporting of all research impact activities across the institution for a given two-digit FoR; and
- the proposed timing for the introduction of the EI in alignment with ERA 2018, given the various issues experienced in the pilot which need further consideration, and the limited time subsequently available for the ARC to finalise guidelines and institutions to prepare both EI and ERA submissions.

Various recommendations for the Government's consideration are embedded in this paper, including:

- rather than attempting to measure research engagement as well as assess research impact, that the assessment focus on either (i) research engagement, as per the ATSE REA model, which draws upon data already reported in order to minimise the administrative reporting burden, or (ii) focussing on the reporting of research impact via case study narratives as per the UK and ATN-Go8 approach;
- that the concept of an 'end-user' would be a more appropriate concept within an impact case study, whereas institutional enabling mechanisms are more likely to occur in supporting engagement;
- that each impact case study be focussed on outlining a narrative regarding the actual impact of a given body of research and its engagement, translation and application journey to that impact;
- that the number of research impact case studies submitted for each university be aligned to their total reported ERA-eligible researcher FTE, similar to the UK REF approach; and
- that the timing of the introduction of the full EI assessment be postponed until at least 2019 so that the ARC has sufficient time to validate the approach and institutions have enough time to prepare.

## 2. Background and Context of the EIAP

In late 2015 the Australian Government launched its National Innovation and Science Agenda (NISA). One of the measures within the agenda was to introduce a national impact and engagement assessment to examine how universities are translating their research into economic, social and other benefits and to encourage greater collaboration between universities, industry and other end-users of research.

The ARC is conducting a pilot assessment to inform the development of the final model, scheduled for rollout in early 2018. The new national assessment is planned to be a companion exercise to ERA (Excellence in Research for Australia), which assesses the quality of research undertaken in Australian universities. The Watt Review recommended that “the results of the first full impact and engagement assessment in 2018 could be used to allocate [Research Block Grant] funding in the order of 10 to 20 per cent in 2019” (*Review of Research Policy and Funding Arrangements – Report, November 2015, p. 73<sup>1</sup>*).

When announcing the pilot, the Minister for Education and Training explained that the intent was to “ensure that taxpayer funds were being targeted at research and initiatives that would ultimately pay dividends for Australian young people, old people, mums and dads.” Furthermore, the Minister stated that he was “...also conscious of keeping the burden of too much reporting and paperwork to a minimum for universities” (*Senator the Hon Simon Birmingham, Media Release, 21 November 2016<sup>2</sup>*), a position very much supported by ARMS and its members.

With those key aims in mind, and the potential that the outcomes of the future assessment may inform a significant component of funding to institutions, ARMS submits the following feedback regarding the EIAP in the hope that it will be of value to the ARC as it progresses development of the final EI assessment model.

## 3. The Evolution of Impact Assessment in Australia

The concept of evaluating the impact of Australian research first took real form when ERA’s predecessor, the Research Quality Framework (RQF), was proposed in 2005 and included assessment of both the ‘quality’ of research (its intrinsic merit and academic impact) and its ‘impact’ (the extent to which it had been successfully applied). As we know, with the change of Government in 2007, the RQF did not proceed and ERA was born in its stead, without the impact component<sup>3</sup>. The proposed RQF impact assessment model was, instead, picked up and further developed by the ARC’s UK equivalent (HEFCE) and their 2014 Research Excellence Framework (REF) subsequently included the assessment of impact using a case study approach.<sup>4</sup>

It is worth noting the lead-time between when HEFCE first announced that it would be developing the new framework in 2007 and when institutions were required to finalise their submissions to the REF in 2014. In fact, the then UK Universities and Science Minister announced in 2010 that the REF would be delayed by a year in order to assess the efficacy of the impact measure<sup>5</sup>. Given the assessment outcomes were going to provide a basis for distributing funding, they wanted to make sure that they got it right and provided institutions with a suitable amount of time to prepare for gathering the new information required. In this context it is also worth noting that, as reported by ARMA colleagues, impact assessment is now well embedded in UK universities and is having a positive effect furthering a culture of engagement between university researchers and industry.

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<sup>1</sup> <https://www.education.gov.au/review-research-policy-and-funding-arrangements-0>

<sup>2</sup> <http://www.senatorbirmingham.com.au/Latest-News/ID/3280/2017-pilot-to-test-impact-business-engagement-of-researchers>

<sup>3</sup> [https://en.wikipedia.org/wiki/Research\\_Quality\\_Framework](https://en.wikipedia.org/wiki/Research_Quality_Framework)

<sup>4</sup> <http://www.hefce.ac.uk/rsrch/REFImpact/>

<sup>5</sup> REF postponed while Willetts waits for impact ‘consensus’, *Times Higher Education*, July 8, 2010

(<https://www.timeshighereducation.com/news/ref-postponed-while-willetts-waits-for-impact-consensus/412384.article>)

Meanwhile debate continued in Australia regarding the usefulness of assessing research impact. Most notably, in 2012 the Australian Technology Network of Universities (ATN) and the Group of Eight (Go8) undertook a joint trial exercise to assess the impact of research, which they called the Excellence in Innovation for Australia (EIA) Trial.<sup>6</sup> The EIA model was largely based on that being developed in the UK and the final report, which was published in early 2014, stated amongst its findings that “using a case study methodology... is applicable as a way forward to a national assessment of research impact” (*Excellence in Innovation: Research impacting our nation’s future – assessing the benefits, Go8 & ATN, p.6*). However, a fundamental concern has always been the potential administrative burden of institutions having to prepare a large number of research impact case study narratives.

As a proposed alternative, therefore, to assessing research impact, in mid-2014 the Australian Academy of Technology and Engineering (ATSE) put forward a proposal to develop a metric, which could measure collaboration between university researchers and industry and other end-users of their research. Their proposed model was called Research Engagement for Australia (REA) and its aim was to provide a measure of research engagement and collaboration as a “forward proxy of impact.”<sup>7</sup> The REA pilot was undertaken in 2015, with the final report published in 2016 stating the key finding that the approach was a cost-effective and robust measure of research engagement. Further, ATSE found that universities were able to participate in the data provisions with minimal resourcing burdens given it largely made use of existing data already reported such as that submitted for HERDC (Higher Education Research Data Collection) and ERA (*Research Engagement for Australia: Measuring research engagement between universities and end-users, ATSE, p.5*).

#### 4. Administrative Reporting Burden

Concerns remain regarding the cost-effectiveness of introducing a new and additional research performance assessment regime in Australia, especially a model that includes engagement metrics PLUS impact case studies. In this context it should be noted that, unlike the ATSE REA, the EIAP’s proposed engagement metrics included a new set of indicators which required a large amount of data not previously collected or reported by institutions.

Further, within the pilot exercise, impact case studies were limited to only one case study per two-digit Field of Research (FoR). ARMS appreciates the perceived intention to limit the narrative component of the submission, thereby reducing the necessary paperwork, however members found that it unfortunately proved to be extremely difficult (and, in many cases, impossible) to adequately present a large amount of research impact activity for the whole institution across any given FoR, as will be explained in further detail below.

It has been conservatively estimated that, on average, participation in the pilot required 12 weeks or more of one full-time equivalent resource per institution. Given the pilot was limited to only certain FoRs, a full end-to-end assessment round would see a substantial increase in required institutional resources. Therefore, should the model used in the full EI assessment closely resemble that which was proposed in the pilot, the primary concern remains to be the high administrative reporting cost.

#### 5. Subjective Engagement Data

One of the fundamental reasons that the engagement component of the EIAP was particularly burdensome, aside from requiring data that are, not routinely collected by institutions, was the proposed definition and application of the concept of an ‘end-user’ in preparing the data. The term was not defined directly, but rather indirectly within the definition provided for “Engagement”, as follows:

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<sup>6</sup> <https://go8.edu.au/programs-and-fellowships/excellence-innovation-australia-eia-trial>

<sup>7</sup> <https://www.atse.org.au/content/publications/reports/industry-innovation/research-engagement-for-australia.aspx>

*“Research engagement is the interaction between researchers and research end-users (including industry, government, non-governmental organisations, communities and community organisations), for the mutually beneficial exchange of knowledge, technologies and methods, and resources in a context of partnership and reciprocity” (2017 EIAP Submission Guidelines, Section 1.10, p.11).*

Elsewhere in the guidelines there was reference to validating whether data were eligible by ensuring that both elements of this definition were met i.e. that the ‘end-user’ was affiliated with an entity which was “beyond academia” AND that there had been a “mutually beneficial exchange of knowledge, technologies and methods, and resources in a context of partnership and reciprocity”. Furthermore, by way of an example, the guidelines stated that “[b]odies (such as government funding agencies) who are disinterested in the specific outcomes of the research funded are not end-users in these circumstances” (p.13). Therefore, extrapolation of the necessary data required subjective assessments in order to determine eligibility i.e. instead of being able to globally designate end-user status to particular organisations, each research output would have needed to be individually assessed to ascertain whether it was co-authored by an ‘end-user’ or arose out of a project co-funded by an ‘end-user’.<sup>8</sup>

Given an end-user needed to meet both components of the definition (as detailed in the revised Submission Guidelines issued on 10 March 2017), institutions inevitably created their own methodologies for compiling their engagement data within the limited time available to finalise their submissions. Some opted to report as well as they could in accordance with the requirements as outlined in the original Submission Guidelines (issued on 21 December 2016) which, instead, required that published research outputs have at least one author from the submitting institution and one or more other “non-institution” co-authors, whilst still attempting to at least try to determine whether that author or funder was from an organisation which could possibly meet the first part of the end-user definition (although even that proved difficult in many cases given links with academic institutions).

Besides necessitating a large amount of effort to prepare the engagement data, the different approaches employed by participating members to interpret and apply the ambiguous requirements of the engagement data elements raised questions as to the direct comparability of the resultant data across institutions. Several institutions commented that providing the engagement data took a longer time to collect than the impact studies.

## 6. Conflated Impact Studies

In terms of the impact component of the pilot submission, although the model utilised a case study approach similar to that employed in the UK and validated by the ATN and Go8, the EIAP again introduced a new element, namely the requirement to submit details regarding “the institution’s approach to promoting the translation of the research into impact” (2017 EIAP Submission Guidelines, p.23). Furthermore, rather than focussing the assessment upon the actual impact of the research, the guidelines stated that:

*“For the purposes of the pilot, the assessment of impact will focus on the institution’s approach to impact, that is, the mechanisms used by institutions to promote or enable research impact” (2017 EIAP Submission Guidelines, Section 3.1, p.23).*

The impact study templates further outlined that the narrative should explain how institutional mechanisms facilitated the realisation of the impact and that the information provided, in this regards, must be “retrospective, and within the context of the impact described” (p.33), i.e. that it should focus on the period between the research and the associated impact. Examples provided within the guidelines included:

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<sup>8</sup> According to the 2015-2016 State of Australian University Research: Volume 1 ERA National Report, data for over 430,000 unique research outputs were collected and submitted by the 41 participating universities in ERA 2015 (p.iii) ([http://www.arc.gov.au/sites/default/files/filedepot/Public/ERA/ERA%202015/ERA\\_2015\\_National\\_Report/ERA2015\\_Introduction.pdf](http://www.arc.gov.au/sites/default/files/filedepot/Public/ERA/ERA%202015/ERA_2015_National_Report/ERA2015_Introduction.pdf)).

- human resources policies (recruitment, retention, promotion, recognition of engagement activities, including placements with end-users etc.);
- the financial or other resources made available to facilitate the realisation of the impact and how they were deployed in relation to the impact described; and
- any reporting mechanisms for impact to be communicated and assessed.

The conflation of having to report within a given case study both the institutional mechanisms AND the impact of the research itself was problematic not only from a submission preparation perspective, but also foreseeably within the assessment process itself. These are two very different concepts (i.e. process versus outcomes) and, in order to determine a rating in accordance with that outlined in the EIAP Assessment Handbook Summary, assessors will have the challenging task of having to consider the maturity of both components collectively.

As there has been no previous requirement to report research impact, there may not be adequate evidence that institutions historically had mechanisms in place which directly enabled impact. Nevertheless, there is evidence that publicly funded research in Australia is ‘impactful’, as demonstrated by the ATN-Go8 exercise.<sup>9</sup> It would be unfortunate if impactful research was, therefore, downgraded on the basis of whether the institution in which the research occurred did or did not have well-established institutional mechanisms supporting the translation of the research into significant social, economic or environmental benefits. If the intention is to encourage the establishment of such mechanisms within universities, then **ARMS suggests** that limiting the focus of the assessment upon the impact of the research will be an inevitable policy driver in its own right.

The other difficulty with the pilot impact studies, as previously mentioned, was the fact that they were to be provided at the two-digit FoR level. Unfortunately the structure of the case study templates, and their restrictive character count limits, did not lend themselves to adequately capturing the full breadth of impact for a given institution. If you consider that the reference period of when the impacts had to have occurred was 2011-2016, with the underpinning research being published as far back at 2002, and that just one of the FoRs selected for the pilot includes 16 diverse four-digit discipline areas (09 Engineering<sup>10</sup>), you may begin to appreciate the amount of research activity institutions attempted to cram into a given impact study.

In order to prepare a cohesive narrative, some resorted to simply limiting the case studies to a given body of research within a particular disciplinary or interdisciplinary area and its resultant impact. This enabled the clearer identification of required beneficiaries, the nature and extent of the impact, including the dates and time periods that the impact occurred, as well as the provision of no more than 10 references of relevant research outputs; an impractical feat if attempting to prepare a consolidated summary of all impacts in one two-digit FoR. Irrespective of the FoR level, however, the issue may be more so whether institutions will be able to submit multiple impact case studies in the EI. The question then arises as to how many case studies would be appropriate.

**ARMS suggests** that the number of impact studies would be dependent upon which two-digit FoR given not all two-digit FoRs are equal in terms of the breadth of disciplines within that FoR at the four and six-digit level and/or the amount of research occurring across disciplines in different universities.

**ARMS would encourage** the Government to consider a similar approach to that used in the UK REF, which limits the number of impact statements allowable relative to the total reportable researcher FTE within the institution.<sup>1112</sup>

<sup>9</sup> <https://www.atn.edu.au/siteassets/publications/50solutions.pdf>

<sup>10</sup> <http://www.abs.gov.au/Ausstats/abs@.nsf/Latestproducts/050A7395E86A9719CA257418000477A2?opendocument>

<sup>11</sup> See ‘How many case studies are submitted per institution?’ FAQ at: <http://impact.ref.ac.uk/CaseStudies/FAQ.aspx>.

<sup>12</sup> It is worth noting that the RAND Corporation estimated the median cost of producing an impact case study in the 2014 UK REF was £7,360 ([https://www.rand.org/content/dam/rand/pubs/research\\_reports/RR700/RR726/RAND\\_RR726.pdf](https://www.rand.org/content/dam/rand/pubs/research_reports/RR700/RR726/RAND_RR726.pdf), *Preparing impact submissions for REF 2014: An evaluation*, p.68).

## 7. Aligned Timing of EI and ERA

For the reasons outlined above, ARMS members have expressed particular concern about the proposed timing for the introduction of the first national EI assessment. As the ARC has announced, it is currently planned to occur alongside ERA as a companion exercise in 2018.<sup>13</sup> Given there are only six months remaining in 2017, this provides very little time for the ARC to finalise and disseminate the final guidelines, and for universities to subsequently undertake submission preparation activities.

It should also be noted that although there has already been three full rounds of ERA, this does not mean that ERA reporting is embedded as a 'business as usual' activity within institutions. Unavoidably every ERA submission still requires a significant outlay of resources to compile the comprehensive six-year dataset and all other associated elements. Adding a new reporting regime in the form of EI to already stretched resources is of major concern.

**ARMS and its members would encourage** the EI assessment postponed until at least 2019, given the level of challenges experienced with the EIAP, and the amount of anticipated resources required to prepare the necessary data and information. In future rounds it may be feasible to combine ERA and EI but, for the initial exercise, it would be preferable to be able to fully focus on the preparation of the different submissions separately.

Extending the timeline for the introduction of the EI would give the ARC more information and time to determine appropriate metrics to measure and assess engagement and/or impact, and ensure that universities have a clear understanding of requirements and measures of assessment. Currently it is unclear how qualitative information, such as the impact studies, are to be assessed and rated, and this may have a significant impact on how universities prepare their submissions and the resultant quality of the ratings outcomes.

## 8. About ARMS

ARMS is the Australasian professional association for research managers and administrators. We have members from universities, independent research institutions, government research and health organisations. Our members span the Australasian geography, from Singapore, New Zealand and Australia.

ARMS is dedicated to the professional development of research managers and administrators; the promotion of the profession of research management; and the enhancement of the research enterprise. We value a strong vibrant sector in the region; high standards of research governance including the protection of integrity and ethics of research; and the profession of research management as integral to the research endeavour.

In preparing this paper, feedback was sought via the ARMS Research Office Directors' Special Interest Group. ARMS would welcome the opportunity to further discuss with the ARC on any of the matters outlined in this response. Furthermore, should the Government wish to consult with a representative group of research managers and administrators, ARMS would be more than willing to arrange for a select group of its members to be convened for the purpose of hopefully providing additional constructive feedback to the ARC for any future EI developments.

**ARMS Board**

**21 June 2017**

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<sup>13</sup> <http://www.arc.gov.au/ei-pilot-overview>