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ISBN: 978-0-6481723-1-4 (online) © Commonwealth of Australia 2017

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El 2018 Framework

Introduction

In December 2015, as part of its National Innovation and Science Agenda (NISA), the Government announced the development of a national Engagement and Impact (EI) assessment which will examine how universities are translating their research into economic, environmental, social and other benefits.

El 2018 aims to create incentives for greater collaboration between universities and industry, as well as other research end-users.

El 2018 is a companion exercise to Excellence in Research for Australia (ERA) 2018, and data collected for ERA 2018 forms part of the El 2018 assessment.

The objectives of EI are to:

- provide clarity to the Government and Australian public about how their investment in university research translate into tangible benefits beyond academia
- identify institutional processes and infrastructure that enable research engagement
- promote greater support for the translation of research impact within institutions for the benefit of Australia beyond academia
- identify the ways in which institutions currently translate research into impact.

This document outlines the framework for EI 2018, including the methodology and indicators. For more detail on the EI 2018 submission process, refer to the EI 2018 Submission Guidelines.

Overview

For EI 2018, university performance is assessed in each discipline using qualitative statements, a small suite of quantitative indicators for engagement, and a narrative based study for impact.

The Unit of Assessment (UoA) is the two-digit Field of Research (FoR) at the institution, with the following exceptions:

- The FoR 11 Medical and Health Sciences is divided into two groups—Biomedical and Clinical Sciences, and Public and Allied Health Sciences—due to the diversity and high volume of research covered by this FoR (see Appendix A for division by four-digit FoR).
- Institutions may submit one interdisciplinary impact study for impact assessment only.
- Institutions may submit one Aboriginal and Torres Strait Islander research impact study for impact assessment only.

There are three separate ratings per two-digit Unit of Assessment (UoA)—one for engagement and two for impact (with the 'approach to impact' and impact example rated

separately). Interdisciplinary and Aboriginal and Torres Strait Islander research UoAs are only assessed for impact and so only receive two ratings.

El 2018 uses a low volume threshold to determine if an institution must make a submission for a UoA. The low volume threshold is 150 weighted apportioned outputs (1 book counts as 5) based on an institution's relevant submission to ERA 2018.

- If a UoA does not meet the low-volume threshold, and an institution considers that there is sufficient evidence in the UoA for it to be assessed for engagement or impact, it can choose to opt-in to either or both.
- The low volume threshold does not apply to the interdisciplinary and Aboriginal and Torres Strait Islander research impact studies. These are both opt-in.

For EI 2018, an institution can request not to be assessed for impact in any UoA, despite meeting the low volume threshold, if the institution has a compelling reason for not being able to put together an impact study. The institution must provide a reason and outline the strategies and timelines necessary for the UoA to participate in future rounds.

The engagement assessment comprises:

- an engagement narrative
- engagement indicator data:
 - cash support from research end-users (specified HERDC Category 1 and HERDC Categories 2, 3, and 4)
 - HERDC research income per FTE
 - specified HERDC Category 1 grants (proportion of HERDC Category 1)
 - research commercialisation income
 - engagement indicator explanatory statement
- Additional engagement data collection
 - co-supervision of HDR students—collected, not assessed

The single rating for engagement is based on the qualitative statements and the indicators, which are assessed holistically. The use of a combination of qualitative statements and metric indicators allows maximum flexibility in the methodology to accommodate differences across different disciplines.

The impact submission takes the form of qualitative studies, which describe the impact that resulted from research and the ways in which institutions facilitated the translation of the research into impact (approach to impact). Each element, that is the impact and the approach to impact, is rated separately.

The EI submission period is 16 May–27 June 2018.

Definitions

The following definitions are used for El 2018.

Research

Research is the creation of new knowledge and/or the use of existing knowledge in a new and creative way to generate new concepts, methodologies, inventions and understandings. This could include the synthesis and analysis of previous research to the extent that it is new and creative.

This is the same definition used for ERA. It is consistent with a broad notion of research and experimental development comprising "creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge" as defined in the ARC funding rules.

Aboriginal and Torres Strait Islander research

Aboriginal and Torres Strait Islander research means that the research (as defined above) significantly:

- relates to Aboriginal and Torres Strait Islander peoples, nations, communities, language, place, culture or knowledges and/or
- is undertaken with Aboriginal and Torres Strait Islander peoples, nations, or communities.

Engagement

Research engagement is the interaction between researchers and research end-users outside of academia, for the mutually beneficial transfer of knowledge, technologies, methods or resources.

Impact

Research impact is the contribution that research makes to the economy, society, environment or culture, beyond the contribution to academic research.

Research end-user

A research end-user is an individual, community or organisation external to academia that will directly use or directly benefit from the output, outcome or result of the research.

Examples of research end-users include governments, businesses, non-governmental organisations, communities and community organisations.

Specific exclusions of research end-users are:

- publicly funded research organisations (CSIRO, AIMS, ANSTO, NMI, DSTO etc.)
- other higher education providers (including international universities)
- organisations that are affiliates, controlled entities or subsidiaries (such as Medical Research Institutes) of a higher education provider
- equivalents (international or domestic) of the above exclusions.

¹ OECD (2015), Frascati Manual: Guidelines for Collecting and Reporting Data on Research and Experimental Development, Paris (Page 28).

Higher degree by research (HDR)

An HDR is a Research Doctorate or Research Masters. A Research Doctorate means a Level 10 Doctoral Degree (Research) qualification as described in the Australian Qualifications Framework (AQF) and a Research Masters means a Level 9 Masters Degree (Research) qualification as described in the AQF. Professional Doctorates may be included but only where at least two-thirds of the qualification is research.

FoR

The FoRs are categories of research methodology in the Australian and New Zealand Standard Research Classification (ANZSRC) www.abs.gov.au Statistical methods & classifications > View All Classifications > www.abs.gov.au > Statistical methods & classifications > View All Classifications > Australian and New Zealand Standard Research Classification. They include major fields of research investigated by national research institutions and organisations, and emerging areas of study.

Engagement

Engagement narrative

Within the engagement component of the assessment, institutions submit a narrative to describe the overall engagement activity, strategies and/or objectives for the UoA.

Additional quantitative evidence, including indicators that are not a part of the EI 2018 engagement indicator suite, can be included in the engagement narrative. Institutions may draw on any qualitative or quantitative information for their narrative that provides evidence of their engagement activities within a UoA.

Engagement indicators

There are four indicators for engagement in EI 2018, which provide quantitative evidence of links between researchers and research end-users.

Cash support from research end-users

This indicator captures cash contributions from research end-users.

Institutions report cash contributions from research end-users against a specified list of HERDC Category 1 grants and any relevant funding in HERDC Categories 2, 3 and 4 by FoR code.

Total Higher Education Research Data Collection (HERDC) income per FTE

This indicator is broader than cash from end-users, including all funding (not just cash from end-users). This data is drawn from an institution's ERA 2018 submission based on a specified list of HERDC Category 1 grants and any relevant funding in HERDC Categories 2, 3 and 4.

NOTE—FTE staff recorded with a function of 'other function' in ERA 2018 will not be included in this calculation.

No new data is required for submission by institutions for HERDC Categories 1, 2, 3, or 4 and FTE.

Proportion of specified HERDC Category 1 grants to all HERDC Category 1 grants

This indicator focuses on the mix of HERDC Category 1 funding arising from specific HERDC Category 1 grants (end-user sponsored) and all HERDC Category 1 grants.

This indicator includes two separate calculations:

- the proportion of specified HERDC Category 1 grants to all HERDC Category 1 grants by grant number
- the proportion of specified HERDC Category 1 grants to all HERDC Category 1 grants by income.

The number of grants is calculated based on the total percentage of the grant received within the reference period.

Research commercialisation income

This indicator is the total research commercialisation income for the UoA. To align with ERA data submission, research commercialisation income is an indicator for all disciplines, **except** the following two:

- 11—Public and Allied Health Sciences*
- 18—Law and Legal Studies

Data for this indicator is drawn from an institution's ERA 2018 submission. ERA collects research commercialisation income at the four-digit FoR level. This data is rolled up to the two-digit level for EI 2018.

Engagement indicator explanatory statement

This allows institutions to provide context and explain their engagement indicator data. This will be particularly helpful in disciplines where the metric indicators may be less relevant, and in UoAs where there may be anomalies in the data.

In addition, in anticipation of future rounds, the ARC is collecting but not assessing data for end-user co-supervision of Higher Degree Research (HDR) students. This data captures the co-supervision of HDR students where at least one supervisor is a research end-user.

Not assessing this data in EI 2018 recognises the challenges there may be for institutions collecting this data and anticipates the upcoming Department of Education and Training (DET) changes to the collection of HDR data. DET will be collecting this data from 2018. The ARC expects that future EI rounds will assess this indicator.

Assessment panels will make a holistic judgement about the performance of a UoA, and will be able to focus on aspects of the narrative or indicators that are particularly relevant for different disciplines. Assessment panels will also see the FTE data for a UoA, to provide context for the narrative and indicators.

Reference period

The reference period for the engagement assessment is 1 January 2014–31 December 2016 (3 years).

^{*}Research commercialisation income is an indicator for 11—Biomedical and Clinical Sciences

Impact

The impact component of the assessment is designed to assess the contribution that research has made to the economy, society, environment or culture, beyond the contribution to academic research, and the ways in which universities have facilitated the translation of research into impact. Institutions submit a single impact study for each UoA that meets the low volume threshold and may opt-in for UoAs that do not. Both the interdisciplinary and Aboriginal and Torres Strait Islander research impact studies are opt-in.

The impact studies have two main sections:

- Impact—where institutions provide details on the impact and the associated research that lead to the impact. This should identify who or what has benefitted from the results of the research and give evidence that describes the extent of the impact.
- Approach to impact—where institutions provide details on how the institution facilitated realisation of the impact. The aim of this section is to highlight the mechanisms and strategies the institution had in place to support translating the associated research into the impact described in the study.

In addition to the above two sections, the impact study requires institutions to provide details of the research associated with the impact.

Reference periods

The reference period for the impact study is 1 January 2011–31 December 2016 (six years).

The reference period for the associated research is 1 January 2002–31 December 2016 (15 years).

While a reference period is not specified for approach to impact, the approach must be retrospective and within the context of the impact study.

Assessment of engagement and impact

There are three separate ratings per UoA—one for engagement and two for impact (with the approach to impact and the impact example rated separately). Ratings are determined by discipline-based panels of experts that comprise distinguished researchers and highly experienced research end-users.

Rating Scales

El 2018 uses a three-point rating scale for the engagement and impact ratings:

- High
- Medium
- Low

Rating Scale descriptors

Engagement

High

- The UoA is characterised by highly effective interactions between researchers and research end-users outside of academia for the mutually beneficial transfer of knowledge, technologies, methods and resources.
- Research engagement is well integrated into the development and ongoing conduct of research within the UoA.

Medium

- The UoA is characterised by effective interactions between researchers and research end-users outside of academia for the mutually beneficial transfer of knowledge, technologies, methods and resources.
- Evidence that research engagement is incorporated into relevant parts of the research process within the UoA and/or that research engagement is improving.

Low

- The UoA has little or no effective interactions between researchers and research end-users outside of academia for the mutually beneficial transfer of knowledge, technologies, methods and resources.
- Little or no evidence that research engagement is incorporated into the research process or that research engagement activities are being developed.

Approach to impact

High

- Mechanisms to encourage the translation of research into impacts beyond academia are highly effective and well-integrated within the UoA.
- Mechanisms for translating research facilitated the impact described.

Medium

- Mechanisms to encourage the translation of research into impacts beyond academia are effective and integrated within the UoA.
- Mechanisms for translating research facilitated the impact described.

Low

- Mechanisms to encourage the translation of research into impacts beyond academia are not effective and integrated.
- The mechanisms for translation did not facilitate the impact described.

Impact

High

- The impact has made a highly significant contribution beyond academia.
- A clear link between the associated research and the impact was demonstrated.

Medium

- The impact has made a significant contribution beyond academia.
- A clear link between the associated research and the impact was demonstrated.

Low

The impact has made little or no contribution beyond academia.

Assessment panels

The assessment panels are organised according to broadly cognate disciplines. Panels comprise a mix of distinguished academic researchers and highly experienced research end-users.

Each panel will assess UoAs relevant to the disciplines it covers. In the case of interdisciplinary or multidisciplinary submissions, a panel may draw on expertise of members of other panels to assist in the assessment.

There are five assessment panels for EI 2018:

- Social Sciences (SS)
- Science and Technology (ST)
- Creative Arts and Humanities (CAH)
- Health and Life Sciences (HLS)
- Aboriginal and Torres Strait Islander Research (ATSI).

Assessment

Process

Panels assess submissions to determine ratings for engagement, approach to impact and impact.

The assessment consists of multiple stages which will guide the assessors through the full assessment process, as shown in the table below:

Stage	Activity
Stage 1	Preliminary individual assessment of UoAs. The assessors provide preliminary ratings for all UoAs to which they are assigned.
Stage 2	Assessors view their ratings alongside those from the other assessors of the same UoA. The assessors moderate their preliminary rating.
Stage 3	Assessors prepare for the final meeting.
Stage 4	The assessment panel comes together for the final meeting, to decide on the final rating for each UoA. Ratings are determined by panel consensus.

The ratings agreed by the panels are final. The panels deliver their agreed final ratings to the ARC. Following completion of the assessment phase, the ARC will publish ratings and will publish the engagement narrative, impact studies and any requests not to be assessed for impact, following the completion of the EI 2018 process.

Panels apply ratings using the rating scale descriptors above and with reference to the following key documents:

- instructions provided to universities in the El 2018 Submission Guidelines
- the assessment framework set out in this document
- the El 2018 Assessment Handbook, which the ARC will publish following the completion of the El process and publication of the El 2018 National Report.

All assessments are made using the evidence provided in the relevant submission and panels cannot refer to additional information for a UoA when making their assessment.

Engagement assessment

The assessment of engagement is holistic with panel members considering all evidence provided in the engagement submission. There are no weightings applied to the individual components of the engagement submission (i.e. the engagement narrative and indicators) for the assessment.

However, assessment panels can put more emphasis on the evidence that is relevant for the discipline.

Impact assessment

The assessments for impact and approach to impact are holistic and based on all the material provided in the impact study.

The rating for impact is based primarily on the evidence universities provide in Part A of the impact study template for a given UoA.

The rating for approach to impact is based primarily on evidence universities provide in Part B of the impact study template.

All evidence in an impact study is assessed by the panels within the context of the field of research in which it is submitted and the type of impact that is described.

Appendix A—4-digit FoR division of FoR 11

Biomedical and Clinical Sciences	Public and Allied Health Sciences
1101 Medical Biochemistry and Metabolomics	1104 Complementary and Alternative Medicine
1102 Cardiovascular Medicine and Haematology	1106 Human Movement and Sports Science
1103 Clinical Sciences	1110 Nursing
1105 Dentistry	1111 Nutrition and Dietetics
1107 Immunology	1117 Public Health and Health Services
1108 Medical Microbiology	1199 Other Medical and Health Sciences
1109 Neurosciences	
1112 Oncology and Carcinogenesis	
1113 Ophthalmology and Optometry	
1114 Paediatrics and Reproductive Medicine	
1115 Pharmacology and Pharmaceutical Sciences	
1116 Medical Physiology	