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# **Table of contents**

Table of contents	3
1. ERA overview	7
1.1 Introduction	7
1.2 Objectives	7
1.3 Disciplines	7
1.4 Indicators	8
1.5 Use of ERA information	8
1.6 Documentation	8
1.7 Timeline	9
1.8 Definitions	9
1.9 Provision of additional information	9
1.10 Further assistance	9
2. Key changes to the submission guidelines for ERA 2018	10
2.1 Structure	10
2.2 Process	10
2.3 Data collection	11
2.4 Textual clarification	11
3. Key elements of ERA	14
3.1 Meet the definition of research	14
3.2 Unit of evaluation	14
3.3 Low volume threshold	14
3.4 Comprehensiveness	14
3.5 Evaluation of interdisciplinary and multidisciplinary research	15
3.6 ERA peer review	15
3.7 Reference periods	16
4. ERA Submission data	17
4.1 Submission components	17
4.2 Explanatory statements	18
4.3 Researchers	19
4.3.1 Eligible researcher criteria	19
4.3.1.1 Key eligibility criteria for researchers	19
4.3.1.2 Staff on LWOP	20
4.3.1.3 Demonstrating a publication association	20
4.3.1.4 Staff employed at less than 0.4 FTE	21

	4.3.1.5 Flowchart for staff and output eligibility	22
	4.3.2 Eligible researcher data	23
	4.3.2.1 Name and alternative names	23
	4.3.2.2 Gender	23
	4.3.2.3 Staff reference	23
	4.3.2.4 ORCID	23
	4.3.2.5 FTE data	24
	4.3.2.6 Assignment of FoR codes to eligible researchers	24
	4.3.2.7 Employment level	24
	4.3.2.8 Employment status	25
	4.3.2.9 Employment function	25
4.4	4 Research outputs	26
	4.4.1 Overarching eligibility criteria	26
	4.4.2 List of eligible research output types	26
	4.4.2.1 Open access policy	27
4	4.4.3 Assignment and apportionment of FoR codes for eligible research outputs	27
	4.4.3.1 Assignment	27
	4.4.3.2 Apportionment	28
4	4.4.4 Aboriginal and Torres Strait Islander research and institutional submission note	es28
	4.4.4.1 Aboriginal and Torres Strait Islander research in ERA	28
	4.4.4.2 Use of Aboriginal and Torres Strait Islander research information in ERA	28
	4.4.4.3 Institutional submission notes	28
4	4.4.5 Research outputs reference period	29
	4.4.5.1 The date of publication rule	29
	4.4.5.2 Exceptions	29
•	4.4.6 Treatment of revisions, reprints and multiple editions	29
	4.4.6.1 Revisions	29
	4.4.6.2 Revisions across research output types	30
	4.4.6.3 Reprints and multiple editions	30
•	4.4.7 Eligible versions of research outputs for ERA peer review	30
	4.4.8 Traditional research output types	30
	4.4.8.1 Books—authored research	31
	4.4.8.2 Chapters in research books—authored research	32
	4.4.8.3 Journal articles	33
	4.4.8.4 Conference publications—full paper refereed	35

4.4.9 NTROs	35
4.4.9.1 Research statement for ERA peer review of NTROs	36
4.4.9.2 Original creative works	36
4.4.9.3 Live performance of creative works	37
4.4.9.4 Recorded/rendered creative works	37
4.4.9.5 Public exhibitions and events	38
4.4.9.6 Research reports for an external body	39
4.4.9.7 Portfolio	39
4.5 Research income	40
4.5.1 Negative or zero income	40
4.5.2 Research income reference period	40
4.5.3 Assignment and apportionment of FoR codes for research income	41
4.5.4 Eligible research income category types	41
4.5.4.1 Australian competitive grants	41
4.5.4.2 Other public sector research income	41
4.5.4.3 Industry and other research income	41
4.5.4.4 CRC research income	42
4.6 Applied measures	43
4.6.1 Assignment and apportionment of FoR codes for applied measures	43
4.6.2 Eligible applied measures	43
4.6.2.1 Plant breeder's rights	43
4.6.2.2 Patents	44
4.6.2.3 Registered designs	45
4.6.2.4 Research commercialisation income	45
4.6.2.5 NHMRC endorsed guidelines	46
5. ERA submission process	47
5.1 Overview of the ERA 2018 submission process	47
5.2 Stages of the ERA submission process	48
5.2.1 Research output preparation	48
5.2.1.1 Tagging	48
5.2.1.2 Electronic repositories	48
5.2.1.3 XML Validations	48
5.2.2 ERA data stages	48
5.2.2.1 ERA submission stage	48
5.2.2.2 ERA data integrity checking stage	49

	5.2.2.3 Certification stage	49
6.	Other matters	50
	6.1 Security and sensitivity	50
	6.1.1 Culturally sensitive research outputs	50
	6.1.2 Australian Government security classified research outputs	50
	6.2 Publication of data	50
	6.3 Managing physical or technical limitations	50
	6.4 Privacy complaints and advice	51
	6.5 Freedom of information	51
	6.6 Managing copyright	52
	6.6.1 Managing copyright in research outputs nominated for ERA peer review and related material	52
	6.6.1.1 Where copyright is owned by institutions	52
	6.6.1.2 Where copyright is owned by eligible researchers	52
	6.6.1.3 Where copyright is owned by third parties	53
	6.7 Intellectual property	54
	6.8 Incomplete, false or misleading information	54
	6.9 Certification	54
	6.9.1 Certification statement	55
	6.9.2 Transmission to ARC of certification statement	57
Α	ppendices	58
	Appendix A—Eligible institutions	58
	Appendix B—Abbreviations	59
	Appendix C—ERA peer review nomination	61
	Appendix D—Low volume threshold	62
	Appendix E—Summary of data requirements for eligible researchers	63
	Appendix F—Contents of research statement for ERA peer review of NTROs	64
	Appendix G—Summaries of research output data requirements	65
	G1 Summary of data requirements for books—authored research	65
	G2 Summary of data requirements for chapters in research books	66
	G3 Summary of data requirements for journal articles—refereed, scholarly journals	67
	G4 Summary of data requirements for conference publications—full paper refereed	68
	G5 Summary of data requirements for NTROs	69
	Appendix H—data requirements for research income categories	70
	Appendix I—Data requirements for applied measures	71

# 1. ERA overview

#### 1.1 Introduction

The Australian Research Council (ARC) is responsible for administering Excellence in Research for Australia (ERA), Australia's national research evaluation framework. ERA aims to identify and promote excellence across the full spectrum of research activity, including discovery, experimental and applied research within Australian higher education institutions.

ERA 2018 will evaluate the quality of the research undertaken in eligible higher education providers ('institutions'). Institutions evaluated as part of ERA are those listed at <u>Appendix A—Eligible institutions</u>.

# 1.2 Objectives

The objectives of ERA are to:

- continue to develop and maintain an evaluation framework that gives government, industry, business and the wider community assurance of the excellence of research conducted in Australian higher education institutions
- provide a national stocktake of discipline level areas of research strength and areas where there is opportunity for development in Australian higher education institutions
- identify excellence across the full spectrum of research performance
- identify emerging research areas and opportunities for further development
- 5. allow for comparisons of research in Australia, nationally and internationally, for all discipline areas.

# 1.3 Disciplines

ERA evaluates the research undertaken in institutions, by discipline.

ERA defines disciplines as four-digit and two-digit Fields of Research (FoR), as identified in the Australian and New Zealand Standard Research Classification (ANZSRC) <a href="https://www.abs.gov.au">www.abs.gov.au</a> Statistical methods & classifications > View All Classifications > Australian and New Zealand Standard Research Classification.

Institutions submit data for ERA at the four-digit FoR level. The ARC calculates indicators at the four-digit and two-digit FoR levels based on the data each institution submits. The ARC combines this information to create four-digit and two-digit Units of Evaluation (UoE). See Section 3.2 for more information. For the full list of disciplines and FoR codes see the ERA 2018 Discipline Matrix.

#### 1.4 Indicators

In ERA, Research Evaluation Committees (RECs) evaluate and rate UoEs. RECs consist of experienced, internationally recognised experts. Three broad categories of indicators inform their evaluations:

- Indicators of research quality
   Research quality is considered based on citation analysis, or ERA peer review, and other supporting quality indicators.
- Indicators of research activity
   Research activity is considered based on research outputs, research income and other research items within the context of the profile of eligible researchers.
- 3. Indicators of research application Research application is considered based on research commercialisation income, patents, plant breeder's rights, registered designs, and National Health and Medical Research Council (NHMRC) endorsed guidelines. Other measures, such as publishing behaviour and some other categories of research income, can also provide information about research application.

# 1.5 Use of ERA information

The ARC will publish outcomes of the evaluations for all disciplines at the four-digit and two-digit FoR level. Information will be published that details outcomes at an institutional and national level. The ARC will also make additional information available to individual institutions with respect to the evaluation of the disciplines within their institutions. Select submitted data from ERA 2018 submissions may also be published (refer to section 6.2).

#### 1.6 Documentation

Institutions should read the *ERA 2018 Submission Guidelines* in conjunction with the following documents, provided on the ARC website—www.arc.gov.au > ERA > ERA 2018

- The ERA SEER 2018 Business Rules and Verification—this provides information to institutions about the system checks that SEER (System to Evaluate the Excellence of Research) will perform against institution submission data for ERA.
- The ERA SEER 2018 Technical Specifications—this provides technical requirements and information for institutions on preparing and submitting ERA 2018 submissions.
- The ERA 2018 Discipline Matrix—this provides information on the indicator applicability for each discipline. This information is provided as a table in Microsoft Excel format.
- The ERA 2018 Submission Journal List—this provides a list of eligible journals and the FoRs assigned to them for ERA 2018. This information is provided as a table in Microsoft Excel format.
- The ERA 2018 Submission Conference List—this provides a lookup table for the conference publication outlets. This information is provided as a table in Microsoft Excel format.

 ERA 2018 Submission Publisher List – this provides publisher look up tables for books and book chapters. This information is provided as tables in Microsoft Excel format.

#### 1.7 Timeline

Phase	Stage	Start Date	Deadline	Responsible
	Submission	19 March 2018	17 April 2018	Institutions
Submission	Data integrity	18 April 2018	10 May 2018	ARC, with institutions
	XML Certification	11 May 2018	16 May 2018	Institutions

## 1.8 Definitions

#### Fields of research

The FoRs are categories of research methodology in the ANZSRC. They include major FoRs investigated by national research institutions and organisations, and emerging areas of study.

#### Research

ERA defines research as 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 definition of research 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.

#### 1.9 Provision of additional information

The ARC will provide any further information regarding the ERA 2018 processes on its website—<u>www.arc.gov.au</u> > ERA > <u>ERA 2018</u>. The ARC will provide this information to the nominated ERA liaison officers within institutions as it becomes available.

The ARC provides information about the ERA 2018 citation data supplier and about how to obtain unique output identifiers on the ARC website—<u>www.arc.gov.au</u> > ERA > <u>ERA 2018</u>.

### 1.10 Further assistance

Please direct queries regarding ERA to the ERA helpdesk by phone during Canberra business hours at (02) 6287 6755 or via email: <a href="mailto:era[@]arc.gov.au">era[@]arc.gov.au</a>.

<sup>&</sup>lt;sup>1</sup> OECD (2015), Frascati Manual: Guidelines for Collecting and Reporting Data on Research and Experimental Development, Paris (Page 28).

# 2. Key changes to the submission guidelines for ERA 2018

The ERA 2018 Submission Guidelines are in an easy to read format. Technical data is now in appendices and the language is simplified and more direct. The change in style does not indicate major changes in the ERA methodology or to the Submission Guidelines. The sections below detail all significant changes to the ERA Submission Guidelines.

There have been a number of changes to the ERA submission guidelines since ERA 2015. Please note that there are changes also to the *ERA-SEER 2018 Business Rules and Verification*, *ERA-SEER 2018 Technical Specifications* and other ERA documentation. Institutions need to refer to these documents when preparing their ERA submission.

#### 2.1 Structure

Restructuring of the submission stages (section 5)

- What was Stage 0 is now within an extended submission stage that allows institutions to fully review submissions before the data integrity checking stage (formerly Stage 2).
- The changes to the stages do not remove anything and with improvements to the business processes and system functionality, ensure there is sufficient time for all submission stages.
- Stage 4, in which institutions would send the signed hard copy of submission certification, has been removed as ERA now requires electronic certification alone.

## 2.2 Process

Requirement for links to outputs to be direct, not to landing pages (4.4.7 and 6.3)

 Where institutions have provided a link to an output, the link must go directly to the output. It must not go to a 'landing page' that provides a link to the output.

Removal of FoRs from the conference list (4.4.8.4)

• The ERA 2018 Submission Conference List remains, but conferences on the list do not have FoRs assigned to them.

Removal of commercial sensitivity (6.1)

 As all outputs submitted to ERA must be publicly available, the ARC has removed all references to commercial sensitivity.

Requirement for publication of data (6.2 and 6.9.1)

• The ARC may publish select submitted data from ERA 2018 submissions. Such data may include, but is not limited to, research output metadata and FoR codes.

No hard copy certification statement (6.9.1)

• Institutions no longer submit a hard copy of the certification statement.

## 2.3 Data collection

Updated FTE staff inclusions (4.3.1.2)

 Leave without pay (LWOP) exceptions have been expanded and listed in more detail.

Change to definition of gender (4.3.2.2)

• In line with the Australian Government Guidelines on the Recognition of Sex and Gender, institutions must provide the gender of the eligible researcher as either "male", "female", or "X (indeterminate/intersex/unspecified)". Previously the options were "male", "female", or "other".

ORCID (4.3.2.4)

 For ERA 2018, if an institution knows an individual researcher's ORCID, they must include it in their ERA data. The ARC will use ORCID data for reporting and analysis purposes only. The data will not form part of the evaluation process and peer reviewers or RECs will not see this information.

Reporting of level of FTE staff (4.3.2.7)

 The levels now reflect the Higher Education Staff Data Collection (HESDC) levels, with no 'other' category.

Employment status (4.3.2.8)

• The term 'other' status has been replaced with 'other employed'.

Aboriginal and Torres Strait Islander research section (4.4.4)

• The provision of Aboriginal and Torres Strait Islander research information in ERA submissions will not result in separate or additional evaluation outcomes. RECs will not consider information grouped by Aboriginal and Torres Strait Islander research but will see outputs identified as Aboriginal and Torres Strait Islander research. The ARC will provide this information to assist RECs with assigning material to other REC members and peer reviewers. Previously RECs did not receive this information.

Digital object identifier (DOI) (4.4.5.1)

• For ERA 2018, where institutions know that an output has a DOI, institutions must submit the DOI for that output.

Removal of esteem measures (was section 5.7 in 2015)

Esteem measures will not form part of the ERA 2018 evaluation.

#### 2.4 Textual clarification

Eligible staff (4.3.1)

• The wording now clearly states that if staff are eligible, institutions must report them in their ERA submission.

Staff affiliation (4.3.1.1)

 The criteria for staff affiliation have not changed, but the wording is more streamlined. Demonstrating a publication association (4.3.1.3)

 Reworded to emphasise that institutions can demonstrate a publication association by other means <u>only</u> if a byline is not available on the output or the published version of the byline is incorrect.

Staff employed at less than 0.4 FTE (4.3.1.4)

• Clarifying that staff employed at less than 0.4 FTE with research only or research and teaching functions must be included in the staff data.

FoR assignment for staff (4.3.2.6)

FoR assignment must represent the focus of the activities of the researcher.

Updated open access policy (4.4.2.1)

 Institutions are required to state whether a research output is openly accessible. For the purpose of ERA 2018, 'openly accessible' is as per the ARC updated Open Access Policy (www.arc.gov.au>Policies and Strategies>Open Access Policy).

Assignment and apportioning of ANZSRC FoR codes (4.4.3)

 The assignment of FoR codes to a research output must reflect the content of the output. That is, research outputs *must not* be assigned to an FoR code for any reason other than the code directly represents the research content of the research output.

Institutional units (4.4.4.3)

• Institutional units are now institutional submission notes. The wording has changed to indicate clearly that these are optional.

Revisions across research output types (4.4.6)

 There has been a clarification and notes that research outputs in the overlapping part of the reference period submitted in 2015 must be submitted in 2018.

Unique output identifier tagging - indexed journals only (4.4.8.3)

 The ARC is providing additional guidance about the requirements for the unique output identifier tagging process. This includes: the general tagging requirements and the timelines and conditions that institutions must meet prior to submission opening.

Clarification on allowable material for non-traditional research output (NTRO) portfolio (4.4.9)

 Institutions may submit a portfolio of items as a single NTRO. All items within the portfolio must now fall within the ERA reference period.

Clarification regarding 30 per cent of NTROs for peer review (4.4.9)

 Clarification that institutions must submit a 30 per cent sample of NTROs for peer review.

Clarification regarding ability for ARC to take action on incorrect coding or false/misleading data (6.8)

 Where the ARC believes that any part of an institution's submission does not fully comply with the ERA 2018 submission documentation or any other part of the ERA methodology, the ARC may take any action it considers necessary to maintain the integrity of the ERA data and processes. This includes, but is not limited to, removing part or all of a submission from evaluation or not providing a rating for relevant unit(s) of evaluation and requesting an audit of the submission data.

Removal of Moral Rights section (was section 6.7 in 2015)

• The ARC has removed the Moral Rights section.

# 3. Key elements of ERA

#### 3.1 Meet the definition of research

Institutions must ensure that all research outputs meet the definition of research (1.8). The ARC may exclude outputs that do not meet this definition of research (see also 6.8). If institutions include outputs that do not meet this definition of research, this may adversely affect the ratings the RECs assign during the evaluation process.

#### 3.2 Unit of evaluation

The UoE for ERA is the FoR at the institution. ERA evaluates research at the four-digit and two-digit FoR level at an institution if a UoE meets the low volume threshold (3.3).

# 3.3 Low volume threshold

To ensure that ERA evaluates meaningful levels of data, there is a low volume threshold for each UoE. ERA evaluates research at the four-digit and two-digit FoR level at an institution if a UoE meets the low volume threshold.

For FoRs with citation analysis, the threshold is 50 apportioned <u>indexed</u> journal articles (see <u>4.4.8.3</u> for more information on indexed journals). If the number of apportioned <u>indexed</u> journal articles over the six year output reference period is less than 50 in any four-digit or two-digit FoR at an institution, then that FoR at that institution will not be evaluated.

**NOTE**—the number must be 50 or greater. For example, 49.9 will not be rounded up to 50 and meet the low volume threshold.

For FoRs that are peer reviewed, the threshold is the equivalent of 50 weighted apportioned research outputs, books have a weighting of 5:1 compared to other research outputs. If the number of weighted apportioned research outputs over the six year output reference period is less than 50 in any four-digit or two-digit FoR at an institution, then ERA will not evaluate that FoR at that institution. This is the only time in ERA that books count as more than one output.

Appendix D provides further examples to explain the low volume threshold.

When an FoR at an institution does not meet the low volume threshold, that UoE will not be evaluated and will be reported publicly as 'not assessed'. However, institutions must submit all data at the four-digit FoR level (see section <u>3.4</u> on comprehensiveness).

# 3.4 Comprehensiveness

Institutions must submit all information for all eligible researchers and all eligible research items produced within the ERA 2018 reference periods. Institutions must submit this information even when it relates to UoEs which do not meet the low volume threshold (3.3 contains further information on the low volume threshold).

# 3.5 Evaluation of interdisciplinary and multidisciplinary research

ERA will evaluate interdisciplinary and multidisciplinary research within their component FoRs.

To facilitate the evaluation of interdisciplinary and multidisciplinary research, institutions may assign up to three four-digit FoR codes to eligible researchers and research outputs. Where institutions have assigned multiple FoR codes to researchers or research outputs, they must give a percentage apportionment of that assignment for each FoR code (see <u>4.4.3.2</u>). For a research output, the apportionment must reflect the disciplinary content.

Institutions should not base coding decisions on university structures, such as bringing together the research output of an inter/multidisciplinary research centre within an institution. For a researcher, the apportionment should reflect the FoRs in which the researcher is active. In recognising that researchers may undertake research outside of the usual focus of their activities, the FoR codes assigned to an eligible researcher do not determine the assignment of FoR codes to outputs authored by that researcher (4.3.2.6 and 4.4.3).

Institutions can assign journal articles with significant content from a particular FoR to that FoR, regardless of which FoR codes the journal in the *ERA 2018 Submission Journal List* has assigned to it (4.4.3.1).

# 3.6 ERA peer review

ERA evaluations are conducted by expert reviewers from Australia and overseas. Peer review and citation analysis both provide information to help reviewers in their decisions. ERA uses citation analysis as an indicator of research quality in disciplines where there are sufficient outputs in indexed peer-reviewed journals to allow robust citation analysis. In disciplines with more diverse outputs, journal citation analysis may not be sufficiently robust. In those disciplines, peer review of a sample of outputs across all output types is the indicator used.

The ERA 2018 Discipline Matrix lists which indicator (either peer review or citation analysis) is used for each FoR in ERA.

For ERA, the peer review process entails the review by experts of a sample of the research outputs submitted, instead of reviewing all submitted outputs. Institutions must nominate 30 per cent of each research output type for each FoR, including low volume four-digit FoRs.

For calculating the 30 per cent peer review sample, all outputs have equal weighting in peer review. That is, books have the same weighting as journal articles and count as one item.

Institutions choose which research outputs to nominate for peer review. However, institutions must draw the peer review sample from a representative sample of the institution's eligible researchers for that four-digit FoR.

The institution must identify the FoR code(s) in which the research output is nominated for peer review. Where a research output has multiple four-digit FoR codes assigned, institutions may nominate in which of the four-digit codes (one or more) they wish the output to be peer reviewed.

The peer review sample for a two-digit FoR is made up of the samples from the four-digit FoRs that sit within the two-digit FoR. This includes low volume four-digit FoRs. The ARC will manage this information. Therefore, institutions do not need to nominate items for peer review at the two-digit level.

Institutions must make all research outputs, including portfolios, nominated for ERA peer review available to the ARC in digital format via an institutionally supported repository (6.3). In addition, a statement identifying the research component of the output (Appendix F) must accompany each non-traditional research output (NTRO) (4.4.9). Appendix C provides further explanation on calculation of the sample.

# 3.7 Reference periods

The ARC will collect submission data for ERA 2018 for the following reference periods.

Data type	Reference period	Years
Research outputs	1 January 2011–31 December 2016	6
Research income	1 January 2014–31 December 2016	3
Applied measures	1 January 2014–31 December 2016	3

 $\underline{4.4.5}$ ,  $\underline{4.5.2}$ , and  $\underline{4.6}$  have additional information on the rules for the reference periods.

Data for eligible researchers is based on a single census date—31 March 2017.

# 4. ERA Submission data

# 4.1 Submission components

The main components of an ERA submission include:

- explanatory statements at <u>4.2</u>
- eligible researcher data at 4.3
- data on research outputs at 4.4
- data on research income at 4.5
- data on applied measures at 4.6.

This section details the eligibility criteria and data requirements for each of these components. Data requirements summary tables are located as follows:

- for eligible researchers at Appendix E
- for research outputs:
  - books—authored research at Appendix G1
  - chapters in research books at <u>Appendix G2</u>
  - journal articles—refereed, scholarly journals at Appendix G3
  - conference publications—full paper refereed at <u>Appendix G4</u>
  - NTRO types at <u>Appendix G5</u>.
- for applied measures:
  - plant breeder's rights at <u>Appendix I</u>
  - patents at Appendix I
  - registered designs at Appendix I
  - research commercialisation income at Appendix I
  - NHMRC endorsed guidelines at <u>Appendix I</u>

# 4.2 Explanatory statements

The ARC requires institutions to submit brief written statements to accompany their data. The aim of these statements is to provide context for the data institutions submit within each two-digit FoR. Explanatory statements enable institutions to identify additional factors (such as any apparent anomalies or unusual patterns in the data) that panel members may need to take into account in making an informed evaluation.

The focus of the explanatory statements must be limited to research activities that took place in the six-year research outputs reference period from 1 January 2011 to 31 December 2016. Although statements must address the two-digit level of research, they may also provide explanations for the relevant four-digit codes beneath them, as REC members will view them alongside both levels of data. Information and claims contained within the statements must align with the associated submission data or provide an explanation of anomalies in the data, as noted above.

Explanatory statements may include the following components:

- Overview—a brief outline of background information relevant to the performance and development of the FoR under consideration. This could include a description of research focus, and trends or shifts in research focus, within the two-digit FoR.
- Publication profile—a description of research strengths (including those underrepresented by the indicators) and an explanation of discipline specific publishing trends (e.g. those that would come about from a particular applied or regional focus).
- Capacity and environment—a profile of staffing, including any significant changes in
  overall staff or resources over time, and the effect of the staffing profile on research
  activity. This includes identification of any significant changes in overall, not
  individual, staff or resources over time. Additionally, a description of research group
  compositions and information on how early career researchers and higher degree
  by research (HDR) students have contributed to the production of the research
  outputs submitted.
- Spectrum of activity—the range of research activity, including fundamental research, strategic research, applied research, experimental development and information about interdisciplinary trends.
- Other—any other information that further elucidates the research activity undertaken and enables an informed evaluation. This may include additional factors not captured in the submission (such as awards/prizes, collaborations).
- Explanatory statements must avoid including data that appears elsewhere in the submission, references to individual researchers where possible, and using embedded links, tables or figures.
- Explanatory statements must avoid adding additional metrics. For example, download count, social media data or citation count.

Institutions must provide one explanatory statement for each two-digit FoR code that meets the low volume threshold. Each statement has a limit of two pages, Arial 11 point, with no images, charts or links to external information and must be uploaded as a machine readable PDF. If a statement does not meet the requirements, ARC staff will remove it and request the institution submit a corrected version. Refer to the *ERA SEER 2018 Technical Specifications* for further detail on how to submit explanatory statements.

#### 4.3 Researchers

# 4.3.1 Eligible researcher criteria

**NOTE**—If staff are eligible, institutions must report them in their ERA submission.

**NOTE**—Institutions cannot submit data for researchers whose function is 'other function' and who have not produced any eligible research outputs. See 4.3.2.9.

This section sets out the researcher eligibility criteria for ERA. Institutions must use the criteria to determine if they can include research outputs and some applied measures in their submission.

For information on preparing submissions, see section  $\underline{5.2.1}$ . A summary of all data requirements for eligible researchers is at  $\underline{\mathsf{Appendix}}\ \underline{\mathsf{E}}$ .

## 4.3.1.1 Key eligibility criteria for researchers

To be eligible, researchers must meet the ERA definition of 'member of staff' that this section outlines, and have an affiliation with an institution on the ERA 2018 staff census date of 31 March 2017. Institutions can only submit research outputs from eligible researchers.

#### Definition of a member of staff

Institutions must read this section in conjunction with the following section 'Definition of affiliation'.

The following information aligns with the definition from the Higher Education Staff Data Collection (HESDC)<sup>2</sup>.

A member of staff is a person who performs duties for the institution or one of its controlled entities and is:

(a)(i) A person employed by the institution or one of its controlled entities on a full time or fractional full time basis.

OR

(a)(ii) A person employed by the institution or one of its controlled entities on a casual basis.

OR

- (a)(iii) An employee of another institution who is working at the institution or one of its controlled entities as:
- visiting staff
- exchange staff
- seconded staff

OR

(a)(iv) A person who works for the institution or one of its controlled entities on a regular basis but receives no payment (e.g. unpaid visiting fellows).

<sup>&</sup>lt;sup>2</sup> http://heimshelp.education.gov.au > <u>HEIMSHELP</u> > <u>Resources</u> > <u>Glossary</u> > <u>Member of Staff</u>

This definition includes:

- staff in the above categories who are in temporary positions or are conjoint, clinical or adjunct appointees
- employees of the institution or one of its controlled entities who work outside Australia.

This definition excludes:

- employees of another institution or organisation providing services to the institution on a contract basis
- self-employed workers.

#### Definition of affiliation

Institutions must read this section in conjunction with the above section '**Definition of a** member of staff'.

An affiliated member of staff is a person who, on the staff census date, is in category (a)(i), (ii), (iii) or (iv) and has a proven publication association with the institution within the research output reference period. Staff in category (a)(i) are also affiliated without a demonstrated publication association.

HDR students are not eligible unless they meet the staff eligibility criteria.

## Specific researcher eligibility

Several staff classifications have more complex rules governing their eligibility, such as staff on leave without pay (LWOP), and staff employed at less than 0.4 FTE.

#### 4.3.1.2 Staff on LWOP

If a member of staff is on paid leave, their current duties are those for the job they would be doing if not on leave. Generally, staff on LWOP who do not have current duties will not be eligible researchers for ERA.

There are two major exceptions to the LWOP rule:

- If another Australian institution engages the staff member on LWOP, they may meet the ERA eligibility criteria. If this is the case, the other Australian institution may submit their research outputs.
- Staff who are on LWOP because of illness/other personal circumstances, who the institution normally employs. The arrangement of leave must be a formal arrangement with the institution and the institution must be able to provide the ARC with the evidence if asked, i.e. approved leave application.

#### 4.3.1.3 Demonstrating a publication association

This section applies to all research output types, including traditional outputs and NTROs at the time of publishing the output.

A publication association is demonstrated in the form of the name or logo of the submitting institution on or within a research output (e.g. in a byline) at the time of publication, which clearly links the submitting institution to the eligible researcher being submitted to ERA.

Only if a byline is not available on the output or the published version of the byline is incorrect, can institutions demonstrate a publication association by:

- Providing a statement from the author that says they undertook the research leading to the publication in their capacity as a staff member of the institution <u>and</u> either:
  - a statement from the Director of Human Resources (or equivalent) that says the author was an appointee of the institution at the date of publication
  - an extract from the staff list of the institution that lists the author as an appointee of the institution at the date of publication.

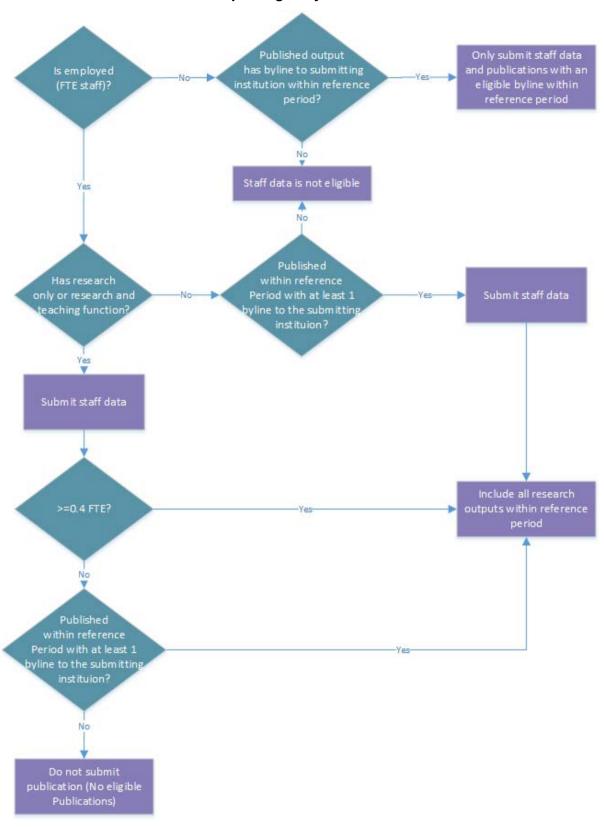
Institutions are not required to include such evidence with their submission data. However, the institution must provide the ARC with the evidence if asked.

#### 4.3.1.4 Staff employed at less than 0.4 FTE

Staff employed at less than 0.4 FTE with research only or research and teaching functions (4.3.2.9) must be included in the staff data. Staff employed at less than 0.4 FTE with the function of 'other' (4.3.2.9) must be included in the staff data if they were published within the reference period. Their publications must be included if they are published within the reference period *and* at least one publication has a byline linking the staff member to the submitting institution, or a demonstration of a publication association where the byline is not available on the publication.

The chart below provides guidance on the eligibility of research outputs.

# 4.3.1.5 Flowchart for staff and output eligibility



# 4.3.2 Eligible researcher data

The eligible researcher data institutions must provide as part of their submission is:

- name and alternative names
- gender
- staff reference
- ORCID
- FTE (if applicable)
- FoR (to a maximum of three four-digit codes)
- employment level (level E–A, Vice-Chancellor, Deputy Vice-Chancellor, Non-academic staff—senior executive, Higher Education Worker'—levels 1–10)
- employment status ('employed', 'employed on casual basis', or 'other employed')
- employment function ('teaching and research', 'research only', or 'other function').

**NOTE**—Institutions do not need to submit data for researchers whose function is 'other function' and who have not produced any eligible research outputs.

<u>Appendix E</u> provides a summary of information institutions must submit for each eligible researcher.

#### 4.3.2.1 Name and alternative names

This is the current full name of the eligible researcher. In addition, any alternative names used by the researcher on research outputs submitted for evaluation.

#### 4.3.2.2 Gender

Institutions must provide the gender of the eligible researcher as "male", "female", or "X (indeterminate/intersex/unspecified)". The ARC will not use this information in the ERA evaluation process nor provide it to peer reviewers or REC members. The ARC will use deidentified aggregated gender data for internal analysis and external reporting only.

#### 4.3.2.3 Staff reference

This is a unique identifier created and allocated by the institution to each eligible researcher for the purposes of ERA. Its only use is to link researchers to relevant research outputs and applied measures within an institution's submission.

#### 4.3.2.4 ORCID

An ORCID is a voluntary unique digital identifier for researchers<sup>3</sup>. If an institution knows an individual researcher's ORCID, they must include it in their ERA data.

<sup>&</sup>lt;sup>3</sup> www.orcid.org

#### 4.3.2.5 FTE data

Institutions only supply FTE data for affiliated researchers who are employed by the institution or one of its controlled entities on a full time or fractional full time basis. That is, they meet criterion (a)(i) of the researcher eligibility criteria (4.3.1.1).

Institutions must calculate FTE based on the work contract as defined in HESDC, as of the staff census date. See below for more information:

- An employee who has a full time work contract at the census date must be attributed an FTE of 1.0.
- An employee who has a fractional full time work contract at the census date will have an FTE of less than 1.0.
- The fraction represents the total number of agreed work hours for that researcher, where 1.0 represents normal work hours on a full time contract.
- The FTE of a single researcher for a single institution cannot exceed 1.0.

Institutions are not required to assign an FTE for eligible researchers who do not meet criterion (a)(i) of the researcher eligibility criteria (4.3.1.1).

Institutions are not required to assign an FTE to eligible affiliated researchers who meet criterion (a)(ii), (a) (iii) or criterion (a)(iv) of the researcher eligibility criteria (4.3.1.1). Instead of FTE, the ARC will derive a headcount for these individuals to include in the eligible researcher profile used in ERA evaluations.

#### 4.3.2.6 Assignment of FoR codes to eligible researchers

FoR assignment must represent the focus of the activities of the researcher. Institutions may assign a maximum of three FoR codes to researchers at the four-digit level and can apportion codes for each eligible researcher. The total of the apportioned percentages must equal 100 per cent and the minimum assigned to a single FoR is 10 per cent.

The FoR codes assigned to an eligible researcher do not determine the FoR assignment of the research outputs of that researcher.

#### 4.3.2.7 Employment level

The level of an eligible researcher is one of the following, based on the HESDC classifications:

- Level A, B, C, D, or E—based on their academic salary classification, in accordance with the levels used in HESDC.
- 'Vice-Chancellor' (HESDC code 001)
- 'Deputy Vice-Chancellor' (HESDC code 005)
- 'Non-academic staff'—senior executive (HESDC code 220)
- 'Higher Education Worker'—levels 1–10 (HESDC codes 201–210)

If a staff member holds multiple appointments within an institution, the institution should choose the most applicable level. A level must be provided for staff whose status is 'other employed' (4.3.2.8) if they are on an academic level corresponding with the levels used in HESDC.

#### 4.3.2.8 Employment status

An eligible researcher's status follows from their affiliation with the institution. The status determines which of the staff member's research outputs the institution can include as part of their submission.

For the purposes of ERA, the status of an eligible researcher is one of the following only:

- employed on a full time or fractional full time basis—see (a)(i)
- employed on a casual basis—see (a)(ii)
- other employed, e.g. seconded or unpaid—see (a)(iii) and (a)(iv).

Refer to the researcher eligibility in 4.3.1.1 for more detail.

#### 4.3.2.9 Employment function

The function of an eligible researcher describes the general type of work that they have formally agreed to undertake with the institution.

Institutions must assign eligible researchers to one of the following roles only:

- Research only—research only work, providing technical or professional research assistance, or the management and leadership of research staff and of staff who support research staff. There may be limited other work, such as participation in the development of postgraduate courses and supervision of postgraduate students. This definition is consistent with the HESDC definition of 'A research only function'.
- Teaching and research—in addition to the activities undertaken in the research only function, this involves undertaking teaching and associated activities (including lecturing, group or individual tutoring, preparation of teaching materials, supervision of students, marking, and preparation for the foregoing activities), or the management and leadership of teaching staff and research staff and people who support such staff. This definition is consistent with the HESDC definition of 'A teaching and research function'.
- Other function—functions other than 'research only' or 'teaching and research'.
   Institutions must classify a researcher whose function is 'teaching only' who has produced one or more submitted research outputs as 'other function'. This definition is consistent with the combined HESDC definitions of 'a teaching only function' and 'an other function'.

Institutions must only report staff with the "Other function" and all their eligible outputs if they have at least one output containing a byline with the submitting institution within the reference period.

In the case of a staff member holding multiple functions within an institution, the institution should choose the most applicable function to submit.

# 4.4 Research outputs

# 4.4.1 Overarching eligibility criteria

**NOTE**—If outputs are eligible, institutions must submit them.

For an institution to submit information on a research output, the research output must meet all of the following criteria:

- meet the definition of research (1.8)
- was published or made publicly available within the research outputs reference period (3.7 and 4.4.5)
- have one or more eligible researchers listed as author(s) or creator(s) either within or on that research output e.g. in the byline (4.3.1)
- be an eligible research output type (4.4.2, 4.4.8 and 4.4.9).

When including research outputs in their ERA submissions, institutions must comply with the rules regarding:

- the assignment and apportionment of FoR codes to research outputs (4.4.3)
   including that the FoR code assignment reflects the content of the output
- the treatment of revisions, reprints and multiple editions (4.4.6)
- eligible versions for ERA peer review (4.4.7).

The ARC will undertake validation to ensure that the output submissions from institutions are broadly in line with their returns to the HERDC.

# 4.4.2 List of eligible research output types

There are four types of traditional research outputs, detailed in section 4.4.8. These are:

- books—authored research
- chapters in research books—authored research
- journal articles—refereed, scholarly journal
- conference publications—full paper refereed.

For some FoRs (as per the *ERA 2018 Discipline Matrix*), the following NTROs are also eligible, detailed in section <u>4.4.9:</u>

- original creative works
- live performance of creative works
- recorded/rendered creative works
- curated or produced substantial public exhibitions and events
- research reports for an external body
- portfolio.

#### 4.4.2.1 Open access policy

Institutions are required to state whether a research output is openly accessible. For the purpose of ERA 2018, 'openly accessible' is as per the ARC updated Open Access Policy (www.arc.gov.au>Policies and Strategies>Open Access Policy) (see below).

Open Access or Openly Accessible—refers to the availability of research outputs via the internet, such that any user can find, freely access, read, download, copy, distribute, print, search, link, crawl, mine and otherwise use and reuse the research outputs both manually and using automated tools. Any use or reuse is subject to full and proper attribution, and usually will have an appropriate licence, such as any of the options available through the Creative Commons suite of licences, and should not infringe any copyrights to third-party material included in the research output.

The ARC will use open access data for reporting and analysis purposes only. Data will not form part of the ERA research quality evaluation process and the ARC will not make it available to peer reviewers or RECs.

# 4.4.3 Assignment and apportionment of FoR codes for eligible research outputs

#### 4.4.3.1 Assignment

Institutions must assign at least one and a maximum of three four-digit FoR codes to each research output.

When assigning four-digit FoR codes to research outputs, institutions must ensure that those codes directly represent the research content of the output. In determining the assignment of FoR codes, institutions must be fully aware of the descriptions of four-digit FoRs in the ANZSRC, including the notes on exclusions and the relevant underlying six-digit codes. The assignment of FoR codes to a research output must reflect the content of the output. That is, research outputs *must not* be assigned to an FoR code for any reason other than the code directly represents the research content of the research output.

Noting the above, in the case of journal articles, institutions may assign only those FoR codes identified for the journal as per the *ERA 2018 Submission Journal List*. The following exceptions apply:

- In the case of articles published in journals where there is a two-digit FoR code in the ERA 2018 Submission Journal List, institutions may assign to the article any relevant four-digit FoR codes from within the two-digit FoR code identified for that journal.
- In the case of articles in multidisciplinary (MD) journals, institutions may assign any relevant four-digit FoR codes to the article.
- In the case of journal articles which have significant research content (66 per cent or more) that is directly described by a particular four-digit FoR code, institutions may assign that four-digit FoR code to the article. Institutions can make that assignment even if the ERA 2018 Submission Journal List does not assign that four-digit FoR code to the journal in which the article was published (the reassignment exception).

#### 4.4.3.2 Apportionment

Institutions must use percentages to apportion the four-digit FoR codes assigned to a research output, researcher, research income or applied measure that has more than one FoR assigned to it. The apportionment must be within the range of 20%–100% for research outputs and 10%–100% for researchers. The apportionment must add to a total of 100%.

The only exception to this is where an institution has assigned an FoR code to an article under the reassignment exception (4.4.3.1). The apportionment for that code must be 66%–100%.

# 4.4.4 Aboriginal and Torres Strait Islander research and institutional submission notes

#### 4.4.4.1 Aboriginal and Torres Strait Islander research in ERA

Institutions may identify individual research outputs in ERA submissions that contain Aboriginal and Torres Strait Islander research content, either wholly or in part.

Identifying Aboriginal and Torres Strait Islander research is not mandatory. Aboriginal and Torres Strait Islander research includes research that significantly relates to Aboriginal and Torres Strait Islander peoples, nations, communities, place, culture and knowledges.

#### 4.4.4.2 Use of Aboriginal and Torres Strait Islander research information in ERA

The identification of Aboriginal and Torres Strait Islander research information in ERA submissions will not result in separate or additional evaluation outcomes. RECs will not consider information grouped by Aboriginal and Torres Strait Islander research. However, RECs will see outputs identified as Aboriginal and Torres Strait Islander research. The ARC will provide this information to assist REC members only with assigning material to other REC members and peer reviewers. This information will not form part of the evaluation.

The ARC may also use this information to inform any future consultations on the methodology for subsequent rounds of ERA.

# 4.4.4.3 Institutional submission notes

Institutions may devise their own institutional reporting notes that link components of their submission to particular institutional units within the institution. These can include academic organisation units, research centres, centres of excellence or departments.

Institutions may submit up to two institutional submission notes for each research output. The use of institutional submission notes is optional and institutions can use them to capture their own internal identifiers, for example internal research output identifiers.

Following completion of the ERA evaluation, institutions can use these notes to compile information about, for example, an institutional unit in 'climate change research' that had its research outputs submitted for evaluation under a variety of FoRs (e.g. environmental science and management, atmospheric sciences, law, soil sciences and demography).

# 4.4.5 Research outputs reference period

A research output must be published within the research output reference period to be eligible for submission. ERA broadly defines 'published' to mean the publication of traditional research outputs (4.4.8). In the case of NTROs, 'published' refers to a research output being publicly available (4.4.9).

For ERA 2018 the research outputs reference period is the six-year period from 1 January 2011 to 31 December 2016 inclusive. Research outputs published or made publicly available outside of the reference period are not eligible for submission.

#### 4.4.5.1 The date of publication rule

The date of publication of a research output must appear on the research output and/or in the information provided for each research output. Where the actual date of publication differs from the listed date of publication, institutions must explain this variance if asked by the ARC. For indexed journal articles, if there is uncertainty about the publication date of a research output, the date used by the citation provider will determine whether the output is inside the reference period. If it is not, it must be removed.

Where an institution knows the digital object identifier (DOI) of an output, institutions must submit the DOI for that output.

#### 4.4.5.2 Exceptions

Where a research output was originally produced in a medium where there is no date of publication stated within or on the output, a letter from an editor, conference organiser or publisher may be acceptable evidence to identify the date of publication. A letter cannot override a date of publication stated within the research output. Institutions may have to provide the letter on request by the ARC.

If no other date exists within or on the research output, the year a research output was 'available' or 'presented' may be acceptable evidence of the date of publication. For example, if presented to a conference in the case of a conference paper.

# 4.4.6 Treatment of revisions, reprints and multiple editions

**NOTE**—the reference period for research outputs for ERA 2018 overlaps with the reference period for research outputs for ERA 2015. For ERA 2018, institutions must submit outputs from 1 January 2011–31 December 2013 that they already submitted for ERA 2015 from staff that were eligible for ERA 2015 and are eligible for ERA 2018.

#### 4.4.6.1 Revisions

There may be cases where there is a revision of a research output after the publication of the output. For example, an updated version of a web-based NTRO. Institutions can only submit a revised research output if it meets all the relevant eligibility criteria and contains substantial new research content. Institutions may need to demonstrate, on request by the ARC, new research content for revisions.

This requirement applies to submissions of research outputs for all ERA rounds and across all ERA reference periods. For example, institutions cannot submit a journal article submitted in ERA 2015 in a revised or updated form for ERA 2018 unless the revision includes substantial new research content. See 1.8 for the definition of research.

#### 4.4.6.2 Revisions across research output types

Institutions must not submit the same research in more than one research output type, unless there is substantial new research content (see <u>1.8</u> for the definition of research).

This applies for traditional outputs and NTROs. This requirement applies to submissions of research outputs for all ERA rounds and across all ERA reference periods.

Institutions may need to demonstrate, on request by the ARC, new research content for corresponding research outputs in different research output categories.

See <u>4.4.9</u> for additional information on multiple exhibitions/performances.

#### 4.4.6.3 Reprints and multiple editions

Institutions may only submit a reprint when there is substantially new research content. Where there has been a reprint or new edition of a research output and both versions are included in an institution's submission for any ERA round, institutions may need to demonstrate, on request by the ARC, new research content for the reprint or new edition See section 1.8 for the definition of research.

# 4.4.7 Eligible versions of research outputs for ERA peer review

The ARC requires electronic access to each research output nominated for ERA peer review. Institutions must ensure this access is directly to the output and not first to a 'landing page'.

Institutions can nominate the following versions of traditional research outputs for ERA peer review:

- Accepted manuscript—the version which has been submitted for publication, accepted for publication, peer reviewed and revised. It is the final version as prepared by the author.
- Version of record—the version as published in its final format. This serves as the
  definitive version and includes any changes made to the accepted manuscript, such
  as pre-publication copyediting, typesetting and proofreading.

For NTROs institution must be able to demonstrate to the ARC on request that the submitted version is the definitive version. The submitted version can also be a version of record made publicly available in the reference period.

Institutions must ensure that they derive any digital copies they intend to store in the repository from the definitive version of an output.

# 4.4.8 Traditional research output types

The eligible research output types common to all FoRs are:

- books—authored research
- chapters in research books—authored research
- journal articles—scholarly, peer reviewed journal
- conference publications—full paper refereed.

For ERA purposes, an acceptable peer review process is one that involves an assessment or review, before publication, of the research output in its entirety by independent, qualified

experts. The term 'independent' in this context means independent of the author. A statement from an author that a research output was peer reviewed is not sufficient evidence.

#### 4.4.8.1 Books—authored research

Institutions must submit information on all eligible books for each year of the reference period.

To be eligible, books must meet all the following criteria, and the criteria outlined at 4.4.1:

- be a major work of scholarship
- be offered for sale in any form of:
  - hard copies, bound
  - CD-ROMs, packaged
  - e-books, on subscription or fee basis.
- have an International Standard Book Number (ISBN)
- be written by a single author, or by joint authors who share responsibility for the whole book
- be published by a commercial publisher.

If a book is only available online, and not published commercially, institutions can only report the book if it has been through an acceptable peer review process and otherwise meets the relevant eligibility criteria.

The types of 'Book' research output **likely** to meet the eligibility criteria are:

- critical scholarly texts
- new interpretations of historical events
- new ideas or perspectives based on established research findings.

Many of the books published by professional bodies do not report original research findings but report the results of evaluations, or repackage existing information for the benefit of professionals and practitioners. It is important that institutions assess these outputs very carefully against the definition of research and include only those books which report research activities.

The types of 'Book' research output **unlikely** to meet the eligibility criteria are:

- textbooks
- anthologies
- edited books
- revisions or new editions.

Within some FoRs, these types of books may be eligible for submission as NTROs, see section <u>4.4.9</u>.

For the submission of books, institutions are required to select an ERA Publisher ID from the *ERA 2018 Submission Publisher List.* The list includes an 'other' category for institutions to select if the publisher does not appear on the list.

Summary of data requirements for books—Appendix G1.

#### 4.4.8.2 Chapters in research books—authored research

Institutions are required to submit information on all eligible book chapters for each year of the reference period.

To be eligible, book chapters must meet all of the following criteria, in addition to the criteria outlined in section 4.4.1:

- be a contribution, consisting substantially of new material, to an edited compilation in which the material is subject to editorial scrutiny. A book chapter may be included if it has been published previously, provided it constitutes substantial new knowledge and constitutes original research
- be a chapter in a book that is offered for sale in any of the forms of:
  - hard copies, bound
  - CD-ROMs, packaged
  - e-books, on subscription or fee basis.
- be a chapter in a book that has an ISBN
- be a chapter in a book published by a commercial publisher.

If a book chapter is only available online, and not published commercially, institutions can only report the book chapter if it has been through an acceptable peer review process and otherwise meets the relevant eligibility criteria. See <u>4.4.8</u> for the definition of an acceptable peer review process.

The types of 'Book Chapter' research output likely to meet the eligibility criteria are:

- scholarly introduction to an edited volume of a chapter in length, where the content
  of the introduction reports research and makes a substantial contribution to a
  defined area of knowledge
- critical scholarly text of chapter length
- critical review of current research.

The types of 'Book Chapter' research output unlikely to meet the eligibility criteria are:

- chapters in textbooks
- entries in reference books
- anthologies
- revisions of chapters in edited books
- forewords
- brief introductions
- brief editorials
- chapters in books either not published by a commercial publisher or offered for sale
- appendices.

For some FoRs, these types of chapters may be eligible for submission as NTROs, see section 4.4.9.

For the submission of chapters in research books, institutions are required to select an ERA Publisher ID from the *ERA 2018 Submission Publisher List*. The list includes an 'other' category for institutions to select if the publisher does not appear on the list.

Summary of data requirements for chapters in research books—Appendix G2.

#### 4.4.8.3 Journal articles

Institutions must submit information on all eligible journal articles for each year of the reference period.

Eligible journal articles are those published in a scholarly peer reviewed journal listed in the *ERA 2018 Submission Journal List*, in addition to the criteria outlined in <u>4.4.1</u>. To be included in the *ERA 2018 Submission Journal List* a journal must have:

- been active during the reference period
- been through an acceptable peer review process
- published original research
- been a scholarly publication
- an International Standard Serial Number (ISSN).

Institutions cannot submit articles from journals not listed in the *ERA 2018 Submission Journal List*. For some FoRs, an article may be eligible for submission as an NTRO, see section <u>4.4.9</u>.

The types of 'Journal Article' research output **likely** to meet the eligibility criteria are:

- commentaries and communications of original research
- research notes
- critical scholarly texts that appear in article form
- articles reviewing multiple works or an entire FoR
- invited papers in journals
- articles in journals targeted to both scholars and professionals
- articles in a standalone series.

The types of 'Journal Article' research output unlikely to meet the eligibility criteria are:

- letters to the editor
- case studies
- articles designed to inform practitioners on existing knowledge in a professional field
- articles in newspapers and popular magazines
- editorials
- book reviews
- brief commentaries and brief communications of original research.

#### Indexed journal articles and non-indexed journal articles

For the purposes of ERA, journal articles are either indexed or non-indexed.

An 'indexed journal article' is an article published in a journal that the ERA 2018 citation provider has indexed as of the ERA 2018 citation census date and that has a unique output identifier. The citation provider supplies the unique output identifier during the article tagging process. See 'Unique output identifier tagging - indexed journals only' section below.

A 'non-indexed journal article' is an article published in a journal which is on the *ERA 2018 Submission Journal List* but which the citation provider does not index and therefore does not have a unique output identifier.

In FoRs that do not use citation analysis (see the *ERA 2018 Discipline Matrix*), all journal articles are non-indexed for the purposes of ERA.

In FoRs that use citation analysis, the ARC determines whether an institution's submission meets the low volume threshold based on the number of indexed journal articles in the submission for a particular discipline. For citation analysis FoRs, non-indexed journal articles and other research outputs do not contribute to the number of articles that determine whether the institution's submission meets the low volume threshold.

For institutions to submit articles in FoRs using citation analysis, they must provide a unique output identifier for each indexed journal article they include in the submission.

# Unique output identifier tagging—indexed journal articles only

The citation provider will communicate directly with institutions regarding the tagging of journal articles with unique output identifiers. It is the responsibility of institutions to work with the citation provider within the specified tagging period and to check the accuracy of the tagged outputs. As part of the tagging service, the citation provider will return metadata to institutions for each tagged journal article. This will allow institutions to verify that the citation provider tagged the correct journal article and to improve the accuracy of their institutional dataset.

Only those journal articles indexed by the citation provider on or before the citation census date will be validated successfully by SEER and contribute to the low volume threshold.

#### Data validation—indexed journal articles only

The ARC will do a number of validation checks on submitted journal articles, which the *ERA* 2018 Technical Specifications details.

Institutions use the metadata returned by the citation provider for submission purposes. The ARC will validate the data for journal articles submitted by institutions against the dataset provided by the citation provider to the ARC for ERA 2018.

#### Year published versus year available

For non-indexed journal articles, either the year published or year available must be within the ERA 2018 research output reference period.

For indexed journal articles, if there is a discrepancy in journal article publication dates between an institution's data and the citation provider's data, SEER will use the citation provider's dataset to determine the eligibility of that journal article.

Summary of data requirements for journal articles—Appendix G3.

#### 4.4.8.4 Conference publications—full paper refereed

Institutions are required to submit information on all eligible peer reviewed conference publications for each year of the research output reference period.

To be eligible, conference publications must meet all the following criteria, in addition to the criteria outlined in 4.4.1:

- published in full—the publication may appear in a number of different formats,
   e.g. a volume of proceedings, a special edition of a journal, a normal issue of a journal, a book or a monograph, digitally or conference or organisational website
- been through an acceptable peer review process (see section 4.4.8)
- presented at a conference, workshop or seminar of national or international significance.

The types of 'conference publication' research output **unlikely** to meet the eligibility criteria are:

- participation in discussions as a panel member
- poster presentations
- facilitation of workshops at conferences
- abstracts of conference publications.

For the submission of conference publications, institutions are required to select the ERA Conference ID from a predetermined conference series list developed by the ARC. The list includes an 'other' category for institutions to select if the conference publication was not presented at a conference on the *ERA 2018 Submission Conference List*.

**NOTE**—Conferences on the *ERA 2018 Submission Conference List* do not have FoR codes assigned to them.

Summary of data requirements for conference publications—Appendix G4.

#### **4.4.9 NTROs**

#### Eligible research output types include the following NTRO types:

- original creative works
- live performance of creative works
- recorded/rendered creative works
- curated or produced substantial public exhibitions and events
- research reports for an external body
- portfolio.

To be eligible, NTROs must have become available publicly during the ERA 2018 research output reference period. Institutions should refer to the *ERA 2018 Discipline Matrix* to establish which NTRO types are applicable to which discipline.

Institutions may submit a portfolio of items as a single NTRO. A portfolio contains items that alone do not represent research, but combined demonstrate coherent research content (4.4.9.7).

In peer review disciplines, institutions must submit a 30 per cent sample of NTROs for peer review (3.6).

#### 4.4.9.1 Research statement for ERA peer review of NTROs

Where institutions nominate NTROs for ERA peer review, they must provide a statement as part of their submission that identifies the research component of each such research output.

The requirements for the 'research statement for ERA peer review of NTROs' are set out in Appendix F—Content of research statement for ERA peer review of NTROs.

Appendix G5—Summary of data requirements for NTROs.

#### 4.4.9.2 Original creative works

In order for research outputs to be eligible as original creative works, the relevant eligible researcher must be the creator of the creative work, rather than, for example, the curator of an exhibition of creative works produced by others.

Institutions must provide digital documentation of any original creative works submitted for ERA peer review, as well as the associated research statements. These must be available via the institution's digital repository.

Institutions can use the exhibition of an original creative work to demonstrate that the work is publicly available, but can only claim each instance of such a research output once. Institutions can submit exhibited creative works as either:

- a single item exhibited as an individual creative work (equal to one research output)
- a portfolio of works exhibited as a cohesive/thematic collection of the work of a single creator (also equal to one research output).

Sub-categories of original creative works are as follows:

Research Output	Description
Visual art work	A research output such as a fine arts and crafts work, diagram, map, photographic image, sculpture or installation.
Design/architectural work	Realised, constructed, fabricated or unrealised building and design projects.
Textual work	Written research outputs that are not eligible for submission as traditional research outputs, such as novels, art reviews, exhibition catalogues and catalogue entries, scholarly editions and scholarly translations.
Other	Original creative works that do not fit the other research outputs types.

#### 4.4.9.3 Live performance of creative works

For live performance of creative works, institutions claim the actual public performance for ERA peer review. A digital recording of the live performance, or part thereof, must be available via the institution's digital repository, in addition to the research statement for ERA peer review of NTROs.

Sub-categories of the live performance of creative works research output type are as follows:

Research output	Description
Music	New work or a demonstrably new or innovative interpretation or production of an existing work.
Play	New work or a demonstrably new or innovative interpretation or production of an existing work
Dance	New work or a demonstrably new or innovative interpretation or production of an existing work
Other	Other live performance of creative works not listed above. New work or demonstrably new or innovative interpretation or production of an existing work.

#### 4.4.9.4 Recorded/rendered creative works

For recorded/rendered creative works, the research component is contained within the recording/rendering. Simple documentations of live performances of creative works without a research component are not eligible for submission. However, institutions may submit the documentation as supporting material under live performance of creative works. A digital version of the recorded/rendered creative work, in addition to the research statement for ERA peer review of NTROs, must be available via the institutionally supported repository (6.3).

Sub-categories of recorded/rendered creative works are as follows:

Research output	Description
Audio/visual recording	Research outputs presented in an audio-visual format, such as films, documentaries or audio-visual presentations.
Performance	Performances (in music, dance, theatre, etc.) created specifically for a recorded medium.
Inter-arts	Recorded/rendered creative works, often experimental, produced in association with other researchers in other disciplinary fields.
Digital creative work	Digital creative works, including creative 3D models, digital outputs of architectural and design projects, computer programs, games and visual artworks.

Research output	Description
Website/web based exhibition	These are eligible as recorded/rendered creative works if the eligible researcher is the creator of the creative works featured in the website. Curated web based exhibitions of the creative work of others must be submitted as curated or produced substantial public exhibitions and events.
Other	Other recorded/rendered creative works not listed above.

#### 4.4.9.5 Public exhibitions and events

The public exhibitions and events research output type aims to capture research undertaken by producers and curators, rather than artists. To be eligible, the exhibition and events must be substantial in nature. Institutions must submit exhibition catalogues as original creative works, in the 'textual work' subcategory (4.4.9.2).

Where a curator is an eligible researcher, the curator may claim exhibitions, festivals and other events as research outputs. Artists may claim exhibitions of their original creative works under the original creative works research output type, where the exhibition of the creative works is used as evidence that those works are publicly available.

Institutions cannot count multiple exhibitions/events as multiple research outputs where the repeated exhibitions/events do not introduce a new research component to the work. For example, institutions can only count a touring exhibition once. Institutions may count multiple exhibitions/events where each subsequent exhibition/event introduces a new research component to the work that builds upon the initial research component of the original exhibition/event.

Institutions may submit recurring exhibitions and events. For example, the Biennale of Sydney is a recurring event with each occurrence being unique rather than a repeat of the previous occurrence.

Sub-categories of curated or produced substantial public exhibitions and events are as follows:

Research Output	Description
Web based exhibition	The curation and/or production of an internet website presenting a collection of creative works where the internet is the medium of the exhibited works.
Exhibition/Event	The curation and/or production of creative works exhibited in a recognised gallery, museum or similar venue, in order to show new works or a different arrangement of works.
Festival	The curation of a festival bringing together innovative work or existing works in an innovative format or through a theme that provides new perspectives and/or experiences.

Research Output	Description
Other	Curated or substantial public exhibitions and events that do not fit into the above sub-categories of the curated or produced substantial public exhibitions and events research output type.

Institutions must make digital evidence of the public exhibitions and events research, in addition to the research statement for ERA peer review of NTROs, available via the institutionally supported repository (6.3).

#### 4.4.9.6 Research reports for an external body

A research report for an external body is a written research output commissioned or solicited by an external body such as a government department or private company.

Sub-categories of research report for an external body are as follows:

Portfolios are eligible for submission in this subcategory only within FoRs flagged with "other NTRO" (see the *ERA 2018 Discipline Matrix*).

Research output	Description
Public sector	A research report undertaken for an Australian, state, territory, local, foreign or international government body or organisation.
Industry	A research report undertaken for a company, industry organisation, industry peak body, or an employer/employee association.
Not-for-profit	A research report undertaken for a body or organisation operating in the not-for-profit sector.
Other	A research report undertaken for an organisation not covered by the above sub-categories.

The following examples are **unlikely** to be eligible for submission under this subcategory:

- Submissions to public inquiries and consultations, including government or parliamentary inquiries.
- Policy blogs or online commentaries/articles.
- Briefing notes.

In some cases, the above items may be eligible as part of a portfolio. Institutions must only submit items that are publicly available (see <u>6.1</u> on sensitive publications).

#### 4.4.9.7 Portfolio

A portfolio is a collection of research outputs that institutions submit as a single NTRO. It is made up of research outputs from the same underlying research endeavour that on their own may not meet the definition of research, but when collected together have coherent research content. All items within the portfolio must fall within the ERA reference period.

#### 4.5 Research income

Institutions must submit information on all research income that falls within eligible income category types. Research income is suitable for submission if it:

- is in an eligible research income category type (4.5.4)
- meets the research income reference period requirements (3.7).

The ARC will collect research income data in line with the following categories collected as part of the Higher Education Research Data Collection (HERDC):

- Australian competitive grants (category 1)
- other public sector research income (category 2)
- industry and other research income (category 3):
  - Australian
  - International A (competitive, peer reviewed research grant income)
  - International B (other income).
- Cooperative Research Centre (CRC) research income (category 4).

Institutions must submit data for each year of the research income reference period as specified in 4.5.2.

HERDC also includes data collection of "HDR Fees for domestic students" and "International C: HDR fees for international students". Institutions do not report these two subcategories (of student fees) for ERA.

Institutions must report all research income at the four-digit FoR level. Institutions must assign research income to a relevant year based on the HERDC method. The *ERA SEER 2018 Technical Specifications* outlines the format in which institutions must submit this information for ERA.

#### 4.5.1 Negative or zero income

The overarching principle for reporting **all** categories of research income, including categories 1 to 4 and research commercialisation income, is to not report zero or negative amounts from the reference period.

Institutions must deduct individual negative amounts for particular grants or years in their calculations. The remaining total is what institutions report in their ERA submission. Where the remaining total is zero or negative institutions must not report income for that category or subcategory.

Please refer to the *ERA SEER 2018 Technical Specifications* for further instructions on submitting negative income.

**NOTE**—research commercialisation income is separate from the above mentioned research income types. See 4.6.2.4.

#### 4.5.2 Research income reference period

Institutions can only include research income that they reported as part of HERDC for the relevant year of the research income reference period. The research income reference period for ERA is the three-year period from 1 January 2014 to 31 December 2016 inclusive.

The ARC recognises that the year a grant is awarded may differ from the year(s) income was received. Institutions may therefore include a grant where they received all or only some of the income in the reference period. In the case of Category 1 income, institutions must identify the proportion of the grant which falls within the reference period.

#### 4.5.3 Assignment and apportionment of FoR codes for research income

Institutions must assign to each item of research income as many four-digit FoR codes as are relevant. FoR assignment must represent the focus of the research funded by the income.

For each item of research income, institutions must determine the apportionment of the FoR codes assigned to the item. The apportionment between each FoR code must total 100 per cent for each item of research income.

The four-digit FoR code may change across years for an individual item of research income. Therefore, institutions must submit information for each item of research income received by the four-digit FoR code that applies for each year of the research income reference period. This applies to items of research income in all categories detailed below.

#### 4.5.4 Eligible research income category types

#### 4.5.4.1 Australian competitive grants

Institutions must report Australian competitive grants (HERDC Category 1) on an individual grant basis so that the ARC can derive a total number of grants received from the submission. This only applies for Australian competitive grants. The list of eligible programs for the reference period is provided as a code table as part of the *ERA SEER 2018 Technology Pack*.

The ARC will count a grant held over two or more years of the research income reference period as only one grant. Where part of a grant falls outside the reference period, institutions must record the proportion of the grant that occurs in the reference period.

Institutions must provide the Grant ID for all Category 1 grants. The IDs must be those of the funding body, not the institution, and be unique across ERA rounds.

#### 4.5.4.2 Other public sector research income

Institutions must only submit other public sector research income that they submitted as part of HERDC for the relevant year.

#### 4.5.4.3 Industry and other research income

Institutions must only submit industry and other research income that they submitted as part of HERDC for the relevant year.

Institutions must separate all research income data in this category according to the following sub-categories:

- Australian (category 3i)
- International A (competitive, peer reviewed research grant income) (category 3ii)
- International B (other income) (category 3iii).

Institutions are required to provide information on industry and other research income as outlined in the ERA XML schema provided as part of the ERA SEER 2018 Technology Pack.

#### 4.5.4.4 CRC research income

Institutions must only submit CRC research income that they submitted as part of HERDC for the relevant year.

Detailed information on what institutions must submit against each income category is at Appendix H.

## 4.6 Applied measures

Institutions must submit information against a range of applied measures. Not all applied measures apply to all FoRs. The *ERA 2018 Discipline Matrix* specifies which applied measures are applicable to which FoR code.

Further information relating to indicators of research application in ERA is at section 1.4.

The ERA applied measures are:

- plant breeder's rights
- patents
- registered designs
- research commercialisation income
- NHMRC endorsed guidelines.

The applied measures reference period is the three years from 1 January 2014–31 December 2016 inclusive.

## 4.6.1 Assignment and apportionment of FoR codes for applied measures

See 4.4.3.2 regarding apportionment.

Institutions must assign one to three four-digit FoR codes to each applied measure, except for research commercialisation income. Research commercialisation income can have as many four-digit FoR codes assigned as are relevant. FoR assignment must represent the focus of the research that led to the applied measures.

For each applied measure, institutions must determine how to apportion each of the FoR codes assigned. The percentages assigned to each FoR code must total 100 for each item.

## 4.6.2 Eligible applied measures

#### 4.6.2.1 Plant breeder's rights

Plant breeder's rights (PBRs) are proprietary rights held by breeders of new varieties of plants and fungi. These rights are legally enforceable and give exclusive commercial rights to market a new variety or its propagating material for the duration of the PBR.

PBRs are granted where a new variety of plant can be demonstrated:

- to be distinct from any other existing variety of common knowledge
- to be uniform and stable
- not to have been sold outside the allowable period
- to have a suitable name.

For ERA purposes, PBRs are those granted under the *Plant Breeder's Rights Act 1994* (Cth) or their international equivalents, as listed in international PBR equivalents below:

- Countries or intergovernmental organisations listed as Members of the International Union for the Protection of New Varieties of Plants (UPOV)<sup>4</sup>, or assessed by IP Australia as having legislation compliant with the UPOV Convention.
- The Plant Patent and Utility Patent systems of the United States of America (as far as they apply to plant varieties).

PBRs are only eligible for inclusion in ERA when:

- the PBR was issued during the applied measures reference period
- the PBR is granted. Provisional PBR are not eligible
- the PBR was granted to an eligible researcher, institution, an institution-owned subsidiary, and/or a spinoff company associated with the institution
- the research behind the PBR meets the definition of research (1.8)

Institutions must include income generated from eligible PBRs under research commercialisation income (4.6.2.4).

Institutions must submit PBRs issued in multiple jurisdictions separately for each country or type. Institutions must identify those PBRs that are essentially the same PBRs registered in more than one country using a family name created by the institution.

Where institutions submit individual PBRs that do not relate to any other submitted PBRs, the PBRs family name must be the same as the individual PBRs name.

#### 4.6.2.2 Patents

A patent is "a right granted for any device, substance, method or process that is new, inventive and useful." It is "legally enforceable and gives [the owner] exclusive rights to commercially exploit the invention for the life of the patent." 5

ERA applied measures include Australian standard patents and their international equivalents. Australian innovation patents are not eligible for ERA.

Eligible patents are those patents issued in the countries or of the types which appear in the Code Table provided as part of the *ERA SEER 2018 Technical Specifications*.

These countries or types are:

- Australia (standard patents only)
- United States
- Europe—European Patent Office (EPO) issued only
- Japan
- other international
- triadic patents—i.e. a series of corresponding patents filed at the EPO, the United States Patent and Trademark Office (USPTO) and the Japan Patent Office (JPO), for the same invention by the same applicant or inventor.

<sup>&</sup>lt;sup>4</sup>http://www.upov.int/portal/index.html.en > Membership > Members > List of UPOV Members

<sup>&</sup>lt;sup>5</sup> IP Australia, 27 September 2016, www.ipaustralia.gov.au > patents

Patents are eligible for inclusion in ERA when:

- the patent was issued during the applied measures reference period
- the patent is sealed (filed patents are not eligible)
- the patent was granted to an eligible researcher, institution, an institution-owned subsidiary, and/or a spinoff company associated with the institution
- the research behind the patent meets the definition of research (1.8).

Where an institution submits a series of triadic patents, if the same patent was issued in different years in different jurisdictions, the institution must submit it against the year in which it was granted. The relevant year must fall within the applied measures reference period.

Institutions must report income generated from patents under research commercialisation income (4.6.2.4).

Institutions must submit patents issued in multiple jurisdictions separately for each country or type. Institutions must identify those patents that are essentially the same patent granted in more than one country using a patent family name created by the institution.

Where an institution submits an individual patent that does not relate to any other submitted patent, the patent family name must be the same as the individual patent name.

#### 4.6.2.3 Registered designs

A registered design is a right granted for new and distinctive designs. Once a registered design is examined and certified, the owner has an exclusive right to use, license and/or sell the registered design, and to enforce it against an infringer. In this context design refers to features which, when applied to a product, render it unique in appearance. This may include shape, pattern or ornamentation.<sup>6</sup>

To be eligible, registered designs must have been granted in the applied measures reference period to an eligible researcher, the institution, an institution-owned subsidiary and/or a spinoff company that is associated with the institution.

Institutions may submit registered designs where the research behind the registered design is clearly identifiable as meeting the definition of research. The ARC may request the submitting institution to justify this inclusion.

Income generated from registered designs, either via licensing or otherwise, must be included in ERA under research commercialisation income (4.6.2.4) provided that the additional requirements pertaining to this measure are met.

#### 4.6.2.4 Research commercialisation income

Institutions must report research commercialisation at the four-digit FoR level. Institutions must assign income to a relevant year. Institutions should read key terms in this section in line with their meaning in the National Survey of Research Commercialisation (NSRC), collected by the Department of Industry, Innovation and Science<sup>7</sup>.

<sup>&</sup>lt;sup>6</sup> See IP Australia for information about designs: <a href="www.ipaustralia.gov.au">www.ipaustralia.gov.au</a> > Designs > <a href="Design basics">Design basics</a>

<sup>&</sup>lt;sup>7</sup>www.industry.gov.au > Innovation > National Survey of Research Commercialisation > Data collection > <u>2015</u> > <u>2015 NSRC Data Collection Survey Instructions</u>

Research commercialisation income is income from:

- institution-owned subsidiaries
- spinoff companies
- licences, options and assignments (LOA).

LOA for inclusion must be negotiated on full commercial terms, granting access to institutional intellectual property (patents, designs, PBR and trademarks) in return for royalties or licence fees.

#### LOA include:

- running royalties
- cashed in equity.

#### LOA do not include:

- material transfer agreements (MTA), including income received to cover costs of making and transferring materials under MTA
- patent expense reimbursement from licensees
- research funding
- a valuation of equity not cashed in
- trademark licensing royalties from university insignia.

Research commercialisation income does not include:

- commercial income from research contracts and consultancies (4.5.4.3),
   commissioned works, student fees, rents or any other source
- CRC research income (4.5.4.4).

#### 4.6.2.5 NHMRC endorsed guidelines

Institutions can include guidelines endorsed by the National Health and Medical Research Council (NHMRC)<sup>8</sup> in their submission.

To be eligible for inclusion in ERA, NHMRC guidelines must:

- meet the definition of research (1.8)
- be published by the NHMRC within the applied measures reference period
- have one or more eligible researchers listed as an author and/or contributor (4.3.1).

NHMRC endorsed guidelines follow the eligible researcher(s) named on the guidelines. If the researcher was at one institution at the time of publication and at another at the staff census date (31 March 2017), only the latter institution can include the guidelines in their submission.

Institutions can submit guidelines with multiple eligible authors from the one institution only once. Where authors are from different institutions, each institution can submit the guidelines.

<sup>&</sup>lt;sup>8</sup> www.nhmrc.gov.au > Guidelines & Publications

## 5. ERA submission process

## 5.1 Overview of the ERA 2018 submission process

#### **Preparation**

Institutions obtain unique output identifiers, access reference materials, populate repositories, and prepare ERA explanatory statements.



#### **Submission**

Institutions upload submission files to SEER. SEER validates and verifies data. Institutions must ensure all outputs nominated for peer review are accessible. Institutions must fix validation errors and resubmit a corrected file. Institutions do not have to correct files with verification warnings but must acknowledge the warnings before submitting their files to the ARC. The institution will be able to see which UoEs meet the low volume threshold once all errors are rectified.



#### Data integrity checking

The ARC performs further verification and integrity checking. Institutions have the chance to correct errors and resubmit. Once the submission passes this check, the ARC accepts and finalises the data.



#### Certification

Vice-Chancellors certify final submissions electronically.

## 5.2 Stages of the ERA submission process

The major stages of the ERA submission process are preparation, submission and data integrity checking, followed by certification.

#### 5.2.1 Research output preparation

#### 5.2.1.1 Tagging

As ERA is a comprehensive evaluation, institutions must submit all eligible research outputs to the ARC. Journal articles that institutions submit for citation analysis require a unique output identifier. To acquire unique output identifier tags for research outputs, institutions must participate in the unique output identifier tagging process with the citation provider (see <a href="https://www.arc.gov.au">www.arc.gov.au</a> <a href="https://www.arc.gov.au">ERA</a> <a href="https://www.arc.gov.au">Description on the tagging process</a>). Institutions must submit all outputs that require citation analysis for tagging, but can choose to submit all outputs for tagging if that is simpler.

#### 5.2.1.2 Electronic repositories

Institutions must populate their digital repositories with research outputs in FoRs nominated for ERA peer review (4.4.7). Institutions must complete this preparatory stage prior to submission commencing.

#### 5.2.1.3 XML Validations

Institution must use the XML Schema provided as part of the ERA 2018 Technology Pack to prepare and validate their XML syntax. This is to ensure that all data formatting complies with the ERA 2018 XML Schema prior to the ERA submission stage opening.

#### 5.2.2 ERA data stages

The ARC ICT system, the System to Evaluate the Excellence of Research (SEER) handles all the submitted data from institutions. Access to SEER opens when the first submission stage commences. SEER, along with ARC staff, will validate and verify the submission data to ensure it aligns with these guidelines, the ERA 2018 Technical Specifications, the ERA XML Schema and ERA-SEER 2018 Business rules and verifications.

There are three data stages to the submission process and institutions must meet the deadlines for each stage, as outlined in section 1.7. However, they may complete the tasks for each stage before the deadline for that stage, and in the case of the submission stage, may proceed to the data integrity checking stage without waiting for its start date. The certification stage requires permission from the ARC before progression. Institutions cannot commence the submission stage prior to its opening on 19 March 2018.

#### 5.2.2.1 ERA submission stage

Institutions will upload submission files in SEER, which in turn validates and verifies them. This validation ensures that a submission file meets the technical requirements and SEER will not accept a file with validation errors. Institutions must fix any validation errors that occur and resubmit a corrected file.

SEER will then verify that the data contained in the file meets ERA business rules. SEER may return a file to an institution with verification errors or verification warnings. Institutions must fix verification errors before a submission can progress in SEER, but verification

warnings do not require changes. However, the institution must acknowledge that it accepts the warning messages before it can finalise its submission.

Using the submission data from each institution, SEER will create UoEs for each two and four-digit FoR. The institution will be able to view the UoE details which include an indicator of which UoEs meet the low volume threshold.

Institutions must also provide the authentication details through SEER for each repository in its submission. They are also responsible for ensuring that SEER can access the research outputs marked for peer review using these details, and that this access be uninterrupted throughout the submission and evaluation process. The ARC requires institutions to maintain this access until the ARC advises it is no longer necessary. The ARC recommends that institutions verify that at least one of each file type is accessible and correctly rendered through SEER prior to submitting the XML file for the data integrity checking stage. There may be significant delays in submission if file types are not checked and then fail. In addition, REC members and peer reviewers will not be able to include material in their evaluation of the UoE if they cannot access it.

The submission stage is complete for an institution when it is satisfied that the submission data is correct.

#### 5.2.2.2 ERA data integrity checking stage

Once an institution submits its data, ARC staff run further verification and integrity checking on the contents of the submission. The ARC will return submissions to the institution if it detects any errors, so that the institution can correct those errors and resubmit, again following the process in the submission stage.

If the submission passes the integrity check, the ARC will accept the data. The DVCR will finalise the submission at the end of this stage. Institutions can ask the ARC to return their data at any point during this stage if they become aware of issues or errors in the content.

#### 5.2.2.3 Certification stage

The final part of the submission process is certification in SEER by the institution's Vice-Chancellor, or equivalent.

#### 6. Other matters

## 6.1 Security and sensitivity

All research outputs submitted to ERA must be publicly available. Therefore, institutions must not submit commercially sensitive outputs that are not publicly available.

#### 6.1.1 Culturally sensitive research outputs

The ARC acknowledges that some submitted research outputs may be culturally sensitive.

Institutions may include culturally sensitive research outputs in their submission, so long as they specifically identify and advise the ARC of the cultural sensitivity of the research output.

Where institutions identify research outputs as culturally sensitive, the ARC will treat the output accordingly.

Institutions are responsible for ensuring they have obtained any necessary permission from the organisation which commissioned the research output, or from the researcher who conducted the research, as defined in the intellectual property arrangements in any commissioning contract or similar legally binding arrangement.

Institutions are responsible for ensuring that the information included in the submission identifies the conditions under which ERA reviewers may view a culturally sensitive research output submitted by the institution (as outlined in the ERA XML schema that is provided as part of the ERA SEER 2018 Technology Pack).

#### 6.1.2 Australian Government security classified research outputs

A research output that includes information classified in the Australian Protective Security Manual as either 'In-Confidence' or greater, or 'Restricted' or greater, **must not be included in an ERA submission.** 

#### 6.2 Publication of data

The ARC is committed to ensuring the ERA evaluation is as open and transparent as possible. To facilitate this the ARC may publish select submitted data from ERA 2018 submissions. Such data may include, but is not limited to, research output metadata and FoR codes. The ARC may access and aggregate the data from each institution for public use. Institutions participating in the ERA process acknowledge their agreement to the publication of this data.

## 6.3 Managing physical or technical limitations

Where an institution has nominated a research output for ERA peer review, it must be stored in an institutionally supported repository in digital form.

The ARC must have electronic access to the research output in the repository. This access must be directly to the output. That is, a link must not go to a 'landing page' that then contains a direct link to the output.

Where the output file size exceeds the limit specified in the *ERA SEER 2018 Technical Specifications*, institutions can split the research output file into two or more files with corresponding repository links. For details on how to preserve viewing order across multiple files and information on title, please see the *ERA SEER 2018 Technical Specifications*.

Where it is impractical to digitise the entire research output, institutions can digitise and store relevant parts of the research output. In such cases, the digitised content must be sufficient to enable peer reviewers to make robust judgements on the quality of the output. For example:

- Where a book is not available in digital form, the cover page, introduction or first chapter, index (as appropriate), and other relevant sections of the book (sufficient for a robust evaluation of the work) must be digitised and stored in the institutional repository.
- In the case of an NTRO such as artworks or sculptures, some digital form (for example, scanning, audio, or video) is required for peer review. The peer reviewer will review NTROs in conjunction with the relevant research statement for ERA peer review of NTROs (<u>Appendix F</u>). The combination of the digital form and the research statement must be sufficient for the peer reviewer to make a judgement of the quality of the research.

## 6.4 Privacy complaints and advice

The ARC in administering ERA must comply with the provisions of the *Privacy Act 1988* (Cth) ('Privacy Act').

Institutions should refer complaints about breaches of privacy to:

The Privacy Contact Officer

Australian Research Council

**GPO Box 2702** 

Canberra ACT 2601

Institutions can email privacy complaints to <a href="mailto:privacy[@]arc.gov.au">privacy[@]arc.gov.au</a>.

Institutions can make privacy complaints directly to the Office of the Australian Information Commissioner. However, the Commissioner prefers that institutions give the ARC an opportunity to deal with the complaint first.

#### 6.5 Freedom of information

All documents sent to the ARC with regard to ERA are subject to the *Freedom of Information Act 1982* (Cth) ('FOI Act'). An authorised FOI decision maker makes decisions regarding requests for access in accordance with the requirements of the FOI Act.

Institutions should refer FOI requests to:

The FOI Contact Officer

Australian Research Council

GPO Box 2702

Canberra ACT 2601

Institutions may also email FOI requests to foi[@]arc.gov.au.

## 6.6 Managing copyright

The ARC wishes to ensure that the implementation of ERA complies with any requirements of the *Copyright Act 1968* (Cth) (the 'Copyright Act').

## 6.6.1 Managing copyright in research outputs nominated for ERA peer review and related material

Within this section, the term 'relevant material' means research outputs nominated by institutions for ERA peer review and related material (such as reviews of live performances).

For FoRs subject to ERA peer review, institutions must ensure that the ARC and ERA reviewers have appropriate access to relevant material in order to facilitate the ERA peer review process. Institutions must facilitate access by:

- storing research outputs in institutionally supported repositories in digital form
- enabling RECs or ERA peer reviewers to view research outputs through the System to Evaluate the Excellence of Research (SEER) and through institutionally supported repositories for ERA evaluation purposes
- facilitating any copyright uses of the relevant research outputs required for ERA purposes in accordance with the ERA 2018 Submission Guidelines.

Where institutions do not own the copyright of relevant material, they will be required under ERA to ensure access to such relevant material for ARC staff and ERA reviewers using one of the following methods:

- Placing the relevant material in repositories accessible only by ARC staff and ERA reviewers (in addition to staff of institutions responsible for maintaining repositories). Institutions must ensure that no others can access such relevant material.
- Arranging links to the relevant material via publishers' platforms.

Other acts that institutions may foreseeably perform in implementing ERA are also examples of acts comprised in the copyright of the relevant material (e.g. copying or scanning copies of a research output contained in a journal 'reproduction').

While the ARC expects that the ERA process will have minimal impact on the rights of copyright owners, institutions must ensure that they comply with the relevant provisions of the Copyright Act.

#### 6.6.1.1 Where copyright is owned by institutions

Where an institution owns the copyright in relevant material, the institution must provide the ARC and ERA reviewers with access to such relevant material, as described in section 6.6.1.

#### 6.6.1.2 Where copyright is owned by eligible researchers

Where one or more eligible researcher(s) own the copyright in relevant material, then the researcher(s) should be encouraged to give permission for the use of that material for the purposes of ERA to allow access to it as described in section <u>6.6.1</u>. The permission must allow relevant research outputs, where available in electronic form, to be stored in an institutionally supported repository in digital form (6.3).

Where such eligible researchers do not expressly consent to the provision of access to relevant material for ERA purposes in the manner described in <u>6.6.1</u>, the ARC will manage copyright in accordance with <u>6.6.1.3</u>.

Where depositing research outputs in an 'open access' repository was a condition of any funding which enabled the research to be undertaken, full public access to the research output(s) must exist, irrespective of the ERA submission process, as a result of the eligible researcher complying with that funding condition.

#### 6.6.1.3 Where copyright is owned by third parties

Where copyright in relevant material is not owned by institutions access to relevant material must still be provided in accordance with section <u>6.6.1</u>. This includes where copyright is owned by eligible researchers whose express consent has not been obtained for research outputs to be used (e.g. reproduced and communicated) for ERA purposes. To prevent copyright infringement, the ARC will grant an authorisation under section 183(1) of the Copyright Act to institutions (representing the Commonwealth).

The Copyright Act provides that the Commonwealth or a State does not infringe copyright by anything done "for the services of the Commonwealth or a State" (section 183). This means that governments can use copyright material, including books, periodicals, music, broadcasts and videos, for government purposes.

However, in such circumstances the Commonwealth must both notify the copyright owner and be prepared to agree terms with the copyright owner for the doing of such acts. A notice to copyright owners is available on the ARC copyright page (<a href="www.arc.gov.au">www.arc.gov.au</a>>Policies and Strategies>Copyright Statement).

Acting under section 183(1), the ARC (representing the Commonwealth) will authorise each institution participating in ERA to do acts in the copyright of relevant material owned by third parties for the purposes of ERA. The ARC will issue the authorisation separately; the *ERA 2018 Submission Guidelines* do not form the authorisation. This authorisation means that an institution participating in ERA may make all uses of relevant material owned by third parties that are necessary or convenient to enable it to participate in ERA.

The section 183(1) authorisation is strictly limited to each institution's participation in ERA and does not extend to any uses of third party copyright in relevant material done for any purpose(s) unrelated to the institution's participation in ERA.

## 6.7 Intellectual property

The ARC does not claim ownership of any intellectual property that forms part of any material submitted by an institution for ERA.

However, where an institution owns intellectual property or the institution has a right to sublicense, institutions must give an express licence to the ARC for the use of material in ERA submissions. The ARC may use this material from time to time as required, for the purposes of ERA and for policy development and program management other than for ERA purposes.

This requirement to give an express licence applies to the submission itself rather than to research outputs (6.6).

The Commonwealth of Australia, as represented by the ARC, retains the intellectual property in all materials created for the purposes of ERA by the ARC, or under the direction or control of the ARC, except where otherwise agreed.

## 6.8 Incomplete, false or misleading information

If the ARC considers that any information provided by an institution as part of its submission is incomplete or inaccurate, or contains false or misleading information, the ARC will in the first instance contact the institution to resolve the issue prior to taking further action. If the ARC identifies any issues prior to submission closing, institutions will be able to explain and/or correct any data anomalies in their submission.

The ARC may in its absolute discretion take any action it considers necessary to maintain the integrity of the ERA process. This includes but is not limited to:

- withholding this information from RECs or other ERA reviewers
- removing part or all of a submission from evaluation after the RECs have received the information
- investigating the matter with a view to prosecution under Commonwealth law.

If the ARC withholds such information from a REC, it will advise the institution of this action and provide a statement of reasons. The ARC may also potentially provide a status of "not rated" to affected units of evaluation. If the ARC deems any part of a UoE incomplete, inaccurate, false or misleading as described above, the ARC may remove the entire UoE.

The ARC reserves the right to audit a submission if it considers that any information provided by an institution as part of its submission is incomplete or inaccurate, or contains false or misleading information.

#### 6.9 Certification

Institutions are required to certify their ERA submissions.

Institutions are responsible for collecting, validating and transmitting to the ARC all information in their submissions by the due date. Institutions are also responsible for certifying that all information in submissions is accurate and comprehensive. Certification takes the form of a signature, in digital form, of a submission certification statement by the Vice-Chancellor or equivalent of the institution.

The final pre-certification step involves the finalisation of the submission at the submission stage of the submission process (5.2.2.3). This finalisation step will lock the submission so that institutions can make no further changes prior to data integrity checks by the ARC. Following the resolution of any data integrity issues identified by the ARC, the Vice-Chancellor or equivalent must certify the submission.

#### 6.9.1 Certification statement

The Vice-Chancellor or equivalent of each institution must provide a signed certification statement in electronic form. No part of any submission is eligible for ERA evaluation in the absence of such a statement. Vice-Chancellors or equivalents are not required to certify the accuracy of any data obtained externally and appended to their submissions by the ARC, including data sourced from the citation data supplier.

The certification statement signed by the Vice-Chancellor or equivalent must certify that:

#### Accuracy and comprehensiveness

- 1. All information in the submission is accurate and appropriately comprehensive (not extending to the citation data provider sourced unique identifier tagging component of indexed journal articles or to electronic repository links).
- The person signing the certification statement has made all reasonable efforts to verify that the information submitted as part of the submission is correct, accurate, and sufficiently comprehensive.

#### Compliance with ERA requirements

- 3. In compiling its submission, the institution has complied with:
  - these ERA 2018 Submission Guidelines ("the submission guidelines")
  - the ERA SEER 2018 Technology Pack ("the technology pack")
  - the terms of the Commonwealth's authorisation of the institution under section 183(1) of the Copyright Act 1968 (Cth) that will be issued separately, and the accompanying document: ERA Copyright Issues: Supplementary ARC Advice Accompanying Section 183(1) Authorisation of an Institution
  - any supplementary advice issued by the ARC after the publication of the submission guidelines and the technology pack but no fewer than 14 days before the deadline for lodging submissions.

#### Privacy

- 4. In compiling its submission, the institution has complied with relevant privacy requirements and taken reasonable steps to ensure awareness of the inclusion in the submission of relevant information and of its use in the ERA process (including provision to RECs and other ERA reviewers) on the part of:
  - all eligible researchers referred to in the submission who maintain any continuing affiliation with the institution and
  - to the maximum extent feasible
  - all eligible researchers referred to in the submission who no longer maintain an affiliation with the institution.

#### Granting of express licence

5. Consistent with the requirement set out at section <u>6.7</u> of the submission guidelines, the institution grants to the ARC a permanent, irrevocable, non-exclusive licence to reproduce, combine with other material, or otherwise use the material submitted as part of ERA. This applies in all cases where the institution either owns, or has the right to sub-license, the relevant intellectual property in that material.

This express licence extends to material in the submission itself, but not to the contents of research outputs. It authorises the Commonwealth's use of material in the ERA submission, from time to time as required, for the purposes of ERA and for policy development and program management other than for ERA purposes.

#### Publication of ERA data

6. In compiling its submission, the institution understands that in supporting the Commonwealth's requirement for open and transparent data, the ARC may publish select submitted data from ERA 2018 submissions. Such data may include, but is not limited to, research output metadata and FoR codes.

#### Matters acknowledged, accepted and agreed to by institution

- 7. The institution acknowledges and agrees that the Commonwealth of Australia, as represented by the ARC, retains the intellectual property in all materials created for the purposes of ERA by the ARC, or under the direction or control of the ARC, except where the ARC and the institution have agreed otherwise (see section 6.7 of the submission guidelines).
- 8. The institution acknowledges and agrees that outcomes of the ERA evaluation will be distributed and published in the manner described in the submission guidelines.
- 9. The institution acknowledges and agrees that the Commonwealth may use all information in its submission for the purposes described at paragraph 5 above.
- 10. In relation to relevant data items, the institution acknowledges and accepts any warnings provided by the System to Evaluate the Excellence of Research (SEER) which are outlined in 'Appendix A—SEER Warnings', which is generated as an appendix to the certification statement. 'Appendix A—SEER Warnings' forms an integral part of that statement.
- 11. The institution acknowledges and agrees that the ARC may take any action it considers necessary to maintain the integrity of the ERA data and processes. This includes but is not limited to removing part or all of a submission from evaluation or not providing a rating for relevant unit(s) of evaluation. The ARC may do this where the ARC forms the view that any part of an institution's submission does not fully comply with the ERA 2018 submission documentation or any other part of the ERA methodology, as determined by the ARC. The institution also acknowledges and agrees that the ARC may take such action at any time before, during or after the ERA process.

The SEER warnings referred to in paragraph 10 alert institutions to a range of issues which may benefit from special checking, such as the apparent existence of two or more eligible researchers with an identical name. Such warnings appear in 'Appendix A—SEER Warnings', which lists any warnings associated with the verification process that arise from legitimate discrepancies between the submission and the SEER business rules. The Vice-Chancellor or equivalent is required in this part of the certification statement to indicate that such discrepancies are legitimate and do not reflect problems with the submission of the

institution. If this is not the case, institutions need to rectify the problems highlighted by the warnings before proceeding to the certification stage.

#### 6.9.2 Transmission to ARC of certification statement

The ARC will provide a pro forma certification statement through SEER. Signature of the certification statement must occur in digital form.

Submission certification deadline for ERA is:

Deadline for electronic certification via SEER
5.00 pm AEST, 16 May 2018

The ARC will only accept late certification statements in exceptional circumstances considered by the ARC to be beyond the control of the institution.

An institution must provide any evidence requested by the ARC to support its claim that failure to meet the deadline was for reasons beyond its control. The ARC reserves the right to seek additional evidence.

The decision of the ARC will be final as to whether exceptional circumstances existed beyond the control of the institution. The ARC will not enter into correspondence on this issue (other than to inform the institution of the decision).

## **Appendices**

## Appendix A—Eligible institutions

Australian Catholic University

Batchelor Institute of Aboriginal and Torres Strait Islander Tertiary Education

**Bond University** 

Central Queensland University

**Charles Darwin University** 

Charles Sturt University

Curtin University of Technology

**Deakin University** 

**Edith Cowan University** 

Flinders University

Federation University Australia

**Griffith University** 

James Cook University

La Trobe University

Macquarie University

Monash University

Murdoch University

Queensland University of Technology

**RMIT University** 

Southern Cross University

Swinburne University of Technology

The Australian National University

The University of Adelaide

The University of Melbourne

The University of New England

The University of New South Wales

The University of Newcastle

The University of Notre Dame Australia

The University of Queensland

The University of Sydney

The University of the Sunshine Coast

The University of Western Australia

**Torrens University** 

University of Canberra

University of Divinity

University of South Australia

University of Southern Queensland

University of Tasmania (incorporating Australian Maritime College)

University of Technology, Sydney

University of Wollongong

Victoria University

Western Sydney University

## Appendix B—Abbreviations

Abbreviation Expanded Abbreviation

ACGR Australian Competitive Grants Register

AEST Australian Eastern Standard Time

ANZSRC Australian and New Zealand Standard Research Classification

ARC Australian Research Council

CRC Cooperative Research Centre

DOI Digital Object Identifier

EPO European Patent Office

ERA Excellence in Research for Australia

FOI Freedom of Information

FoR Field of Research (ANZSRC)

FTE Full Time Equivalent

HDR Higher Degree by Research (student)

HERDC Higher Education Research Data Collection

HESDC Higher Education Staff Data Collection

IP Intellectual property

ISBN International Standard Book Number

ISMN International Standard Music Number

ISSN International Standard Serial Number

JPO Japan Patent Office

LOA Licences, Options and Acquisitions

LWOP Leave without pay

MD Multidisciplinary

MTA Material transfer agreements

NHMRC National Health and Medical Research Council

NISA National Innovation and Science Agenda

NMI National Measurement Institute

Abbreviation Expanded Abbreviation

NSRC National Survey of Research Commercialisation

NTRO Non-Traditional Research Output

ORCID Open Researcher and Contributor ID

PBR Plant Breeder's Rights

REC Research Evaluation Committee

SEER System to Evaluate the Excellence of Research

UoE Unit of Evaluation

UPOV International Union for the Protection of New Varieties of Plants

USPTO United States Patent and Trademark Office

XML eXstensible Markup Language

## Appendix C—ERA peer review nomination

When calculating the number of research outputs for each sample, institutions must round up all fractions to the next number. For example, an institution submits 31 conference papers for a four-digit FoR. When nominating the 30 per cent sample, the institution must nominate 10 conference papers ( $30\% \times 31 = 9.3$ , rounded up to 10).

When the number of a particular research output type is greater than zero, institutions must provide at least one research output for peer review.

The total sample required for each four-digit FoR is the sum of the sample for each research type within the FoR. This may mean that sometimes the total sample for an FoR is greater than 30 per cent.

The table below shows how peer review nomination could work for a four-digit FoR. Note that the table does not list all possible research outputs types.

	Book	Journal article	Conference paper	NTRO	Total research outputs
Research volume	10.00	26.66	31.00	0.7	68.36
Peer review sample (number of outputs)	3	8	10	1	22
Peer review sample (% required)	30%	30% (rounded up)	30% (rounded up)	30% (rounded up)	Greater than 30%

## Appendix D—Low volume threshold

Here is an example of FoR apportionment for a book and a journal article.

	FoR A % apportionment	FoR B % apportionment	Number of outputs FoR A	Number of outputs FoR B
Book*	40	60	2	3
Journal article	50	50	0.5	0.5

<sup>\*</sup>Books have a weighting of 5:1 compared to other research outputs when calculating the low volume threshold.

The ARC combines outputs from the entire four-digit FoR within a two-digit FoR to the two-digit level for evaluation. This means that an institution could meet the threshold for a two-digit FoR when it doesn't meet the threshold for any four-digit FoR. The table below gives a simple example.

	Four-digit FoR 0101	Four-digit FoR 0102	Four-digit FoR 0103	Total combined to two-digit FoR 01
Number of outputs	20	25	15	60
Meets threshold?	No	No	No	Yes

If the combined number is under 50, it is not rounded up and none of the FoRs at four or two-digit will meet the threshold. The table below gives a simple example.

	Four-digit FoR 0101	Four-digit FoR 0102	Four-digit FoR 0103	Total combined to two-digit FoR 01
Number of outputs	20.2	5.3	24.4	49.9
Meets threshold?	No	No	No	No

# Appendix E—Summary of data requirements for eligible researchers

A summary of information institutions submit for each eligible researcher. See also figure at  $\frac{4.3.1.5}{1.5}$ .

Status ( <u>4.3.2.8</u> )	Employed (≥ 0.4 FTE and < 0.4 FTE)		Employed on casual basis and Employed- other (includes LWOP exceptions– <u>4.3.1.2</u> )	
Function (4.3.2.9)	'research only' 'other' and 'research and teaching'		'research only', 'research and teaching' and 'other'	
Affiliation		Must be published within reference period	Must have a publication association	
Staff data ( <u>4.3.2</u> )		Submit staff da	ta (see below for list)	
Research outputs to include	< 0.4 FTE wi association. All < 0.4 FTE with association. No	th a publication research outputs out a publication research outputs	Only outputs with an eligible byline	
Staff data to inclu	de (where applic	able)		
Last name	Required			
Honorific	Required if applicable			
First name	Required			
Middle name	Required if applicable			
Alternative name(s)	Required if applicable			
Gender	Required			
Staff reference	Required			
ORCID		Required if available		
FTE	rec	quired	Not to be submitted	
FoR (max. of three four-digit codes)	Required			
Level ( <u>4.3.2.7</u> )	Required			

## Appendix F—Contents of research statement for ERA peer review of NTROs

For NTROs nominated for ERA peer review, institutions must provide a statement identifying the research component of the output as part of the submission of an institution. REC members and ERA peer reviewers will evaluate NTROs selected for ERA peer review in the context of the research component as identified in the research statement.

The statement must be no more than 2000 characters including spaces (around 250 words) and cannot contain any embedded links. Research statements need to address the following categories:

#### Research background

- Field
- Context
- Research aim

#### Research contribution

- Innovation
- New knowledge

#### Research significance

Evidence of excellence

The following is an example of an acceptable visual arts research statement:

#### Research background

Current international developments in painting have identified the need to establish complex forms for representing identity in terms of facial expression. While this research recognises the significance of facial expression, it has overlooked the unstable nature of identity itself.

#### Research contribution

The paintings Multiple Perspectives by Y address the question of the unstable nature of identity as expressed in painterly terms through a study in unstable facial phenomenon using the philosophical concept of 'becoming'. In doing so, it arrives at a new benchmark for the FoR in understanding visual identity, namely that identity is not bound to stable facial phenomena but, like other forms of meaning, is constantly undergoing change.

#### Research significance

The significance of this research is that it overcomes barriers for visually understanding the complex nature of identity and its expressive painterly possibilities. Its value is attested to by the following indicators:

- Selection of the painting for inclusion in the international exhibition Documenta, Kassel, Germany.
- Its inclusion as a case study in the renowned Courtauld Institute, University of London, Issues in Contemporary Art graduate seminar series.
- It being the subject of a chapter in the book Identity Reframed published by Thames and Hudson and authored by the renowned art historian Z.
- It forming part of a competitively funded ARC project.

## Appendix G—Summaries of research output data requirements

## G1 Summary of data requirements for books—authored research

Outlined in the following table is a summary of information institutions must submit for each book.

Data Item	Requirement to include for each book
Staff creator(s)	Required for all authors who are eligible researchers
Creator(s)	Required to list all authors of the book
Title	Required
Place of publication	Required
ERA publisher ID	Required (selected from the ERA 2018 Submission Publisher List)
Publisher other	Optional
Year published	Required
Year available	Optional
DOI	Optional
ISBN	Required
Extent	Optional
Edition	Optional – required if a revision
Translated	Optional
Is culturally sensitive	Optional
Sensitive handling note	Required if output is sensitive
Electronic location	Required if nominated for ERA peer review
Available in an open access repository	Required (Yes/No)
Four-digit FoR code assignment	Required (a maximum of three)
Four-digit FoR code apportionment	Required
Nominated FoR code for peer review	Optional (a maximum of three)
Aboriginal and Torres Strait Islander research	Optional
Institutional submission note(s)	Optional
Is revision	Optional

## G2 Summary of data requirements for chapters in research books

Outlined in the following table is a summary of information institutions submit for each book chapter.

Data Item	Requirement to include for each book chapter
Staff creator(s)	Required for all authors who are eligible researchers
Creator(s)	Required to list all authors of the book chapter
Editor(s)	Required to list all editors of the book
Title of the book chapter	Required
Title of the book	Required
Place of publication	Required
ERA publisher ID	Required (selected from the ERA 2018 Submission Publisher List)
Publisher other	Optional
Year published	Required
Year available	Optional
DOI	Optional
ISBN	Required
Extent	Optional
Edition	Optional
Translated	Optional
Is culturally sensitive	Optional
Sensitive handling note	Required if output is sensitive
Electronic location	Required if nominated for ERA peer review
Available in open access repository	Required (Yes/No)
Four-digit FoR code assignment	Required (a maximum of three)
Four-digit FoR code apportionment	Required
Nominated FoR Code for peer review	Optional (a maximum of three)
Aboriginal and Torres Strait Islander research	Optional
Institutional submission note(s)	Optional

# G3 Summary of data requirements for journal articles—refereed, scholarly journals

The following table summarises information institutions submit for each journal article.

Data Item	Requirement to include for each journal article
Staff creator(s)	Required for all authors who are eligible researchers
Creator(s)	Required to list all authors of the journal article
Article title	Required
Journal title	Required
Place of publication	Optional
Year published	Required
Year available	Optional
DOI	Optional
Volume	Optional
Issue	Optional
ISSN	Required (supplied by the ERA 2018 Submission Journal List)
Extent	Optional
Translated	Optional
Is culturally sensitive	Optional
Sensitive handling note	Required if output is sensitive
Electronic location	Required if nominated for ERA peer review
Available in open access repository	Required (Yes/No)
Unique output identifier	Required for indexed journal articles
ERA journal ID	Required (supplied by the ERA 2018 Submission Journal List)
Four-digit FoR code assignment	Required (identified by the <i>ERA 2018 Submission Journal List</i> or selected by the institution in the following circumstances only — two-digit journals, multidisciplinary journals, or journal articles with significant content (66%) not represented in the preassigned FoRs within the <i>ERA 2018 Submission Journal List</i> .)
Four-digit FoR code apportionment	Required
Nominated FoR code for peer review	Optional (a maximum of three)
Aboriginal and Torres Strait Islander research	Optional
Institutional submission note(s)	Optional

## G4 Summary of data requirements for conference publications—full paper refereed

The following table summarises the information that institutions are required to submit for each conference publication.

Data Item	Requirement to include for each conference publication
Staff creator(s)	Required for all authors who are eligible researchers
Creator(s)	Required to list all authors of conference publication
Conference paper title	Required
Conference outlet title	Required
ERA conference ID	Required (selected from the ERA 2018 Submission Conference List)
Conference other	Optional
Conference venue	Required
Publisher of conference publication	Required
ISSN	Optional
ISBN	Optional
Place of publication	Optional
Year published	Required
Year available	Optional
DOI	Optional
Issue	Optional
Volume	Optional
Extent	Optional
Translated	Optional
Is culturally sensitive	Optional
Sensitive handling note	Required if output is sensitive
Electronic location	Required if nominated for ERA peer review
Available in open access repository	Required (Yes/No)
Four-digit FoR code assignment	Required (a maximum of three)
Four-digit FoR code apportionment	Required
Nominated FoR code for peer review	Optional (a maximum of three)
Aboriginal and Torres Strait Islander research	Optional
Institutional submission note(s)	Optional Optional

## **G5 Summary of data requirements for NTROs**

The following table is a summary of information institutions must submit for each NTRO type.

Data Item	Requirement to include for each NTRO
Staff creator(s)	Required for all authors who are eligible researchers
Creator(s)	Required to list all authors of the output
Title	Required
Place of publication	Required
Publisher	Optional
Year published or year publicly available	Required
Year presented	Optional
DOI	Optional
Standard number	Optional (e.g. International Standard Music Number (ISMN))
Issue	Optional
Volume	Optional
Extent	Optional
Translated	Optional
Is culturally sensitive	Optional
Sensitive handling note	Required if output is sensitive
NTRO category	Required
Media	Required if available (e.g. interactive video installation, website)
Notes	Required if available (e.g. include venue name and type, venue commissioner, role of creator).
Electronic location	Required if nominated for ERA peer review
Large repository file	Optional
Available in open access repository	Required (Yes/No)
Four digit FoR code assignment	Required
Four-digit FoR code apportionment	Required (a maximum of three)
Nominated FoR code for peer review	Optional (a maximum of three)
Aboriginal and Torres Strait Islander research	Optional
Institutional submission note(s)	Optional
Portfolio name	Required for items that are part of a portfolio
Portfolio number	Required for items that are part of a portfolio
Research statement	Required if nominated for ERA peer review (in the case of portfolios, only one statement can be submitted)

## Appendix H—data requirements for research income categories

Data item for	Income type			
inclusion	Australian competitive grant research (ACGR) income	Other public sector research income	industry and other research income (all subcategories)	CRC research income
Grant ID	Yes	No	No	No
Total amount received	Yes	Yes	Yes	Yes
Percentage of grant within reference period	Yes	No	No	No
Reference year	Yes	Yes	Yes	Yes
ACGR code	Yes	No	No	No
Four-digit FoR code assignment	Yes (as many as are relevant)	Yes (as many as are relevant)	Yes (as many as are relevant)	Yes (as many as are relevant)
Four-digit FoR code apportionment	Yes	Yes	Yes	Yes

## Appendix I—Data requirements for applied measures

Data item	Include
Plant breeder's rights	
PBR family Name	Yes
PBR name	Yes
PBR number	Yes
Country of registration	Yes
Year enforceable	Yes
Staff reference(s)	Yes (if the PBR is in the name of an eligible researcher or eligible researchers)
Four-digit FoR code assignment	Yes (a maximum of three)
Four-digit FoR code apportionment	Yes
Patents	
Patent family name	Yes
Patent title	Yes
Patent registry	Yes
Patent number	Yes
Year granted	Yes
Staff reference(s)	Yes (if the patent is in the name of an eligible researcher or eligible researchers)
Four-digit FoR code assignment	Yes (a maximum of three)
Four-digit FoR code apportionment	Yes

Data item	Include
Registered designs	
Registry organisation	Yes
Registered design name	Yes
Register ID	Yes
Year certified	Yes
Staff reference(s)	Yes (if registered in the name of an eligible researcher or eligible researchers)
Four-digit FoR code assignment	Yes (a maximum of three)
Four-digit FoR code apportionment	Yes
Research commercialisation income	
Total amount received	Yes
Reference year	Yes
Four-digit FoR code assignment	Yes (as many as are relevant)
Four-digit FoR code apportionment	Yes
NHMRC endorsed guidelines	
Staff ID	Yes
Guideline name	Yes
Year published	Yes
Four-digit FoR code assignment	Yes (a maximum of three)
Four-digit FoR code apportionment	Yes