Excellence in Research for Australia 2015 Update

Dr Tim Cahill
Director
Research Evaluation
What is ERA?

• ERA evaluates the quality of the research undertaken in Australian universities against national and international benchmarks.

• The outcomes (ratings) are determined and moderated by committees of distinguished researchers, drawn from Australia and overseas.

• The unit of evaluation is broadly defined as the Field of Research (FoR) within an institution based on the Australia and New Zealand Standard Research Classification (ANZSRC).

• The indicators used in ERA include a range of metrics such as citation profiles which are common to disciplines in the natural sciences, and peer review of a sample of research outputs which is more broadly common in the humanities and social sciences.

• ERA is a comprehensive collection. The data submitted by universities covers all eligible researchers and their research outputs.
Definition of research

“...the creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies, inventions and understandings. This could include synthesis and analysis of previous research to the extent that it is new and creative.” (ERA 2015 Submission Guidelines)
## Volume and Activity
- **Staffing Profile**
- **Research Outputs**
- FoR codes are apportioned to Journal articles from ERA Journal List or FoR of institution’s choice where content >66%.
- All other outputs and eligible researchers can be assigned and apportioned to up to 3 four-digit FoR codes of the institution’s choice.
- Eligible researchers must be employed on the census date to count towards ‘FTE’.

## Publishing Profile
- **Journal articles**
- **Conference publications**
- **Books**
- **Book Chapters**
- Journal articles are apportioned against the FoR codes of the ERA Journal List, or Institutions may assign to a journal article an FoR code outside of the ERA Journal List FoR code, if 66% or more of the journal article belongs to another FoR code.
- Eligible researchers must be employed on the census date to count towards ‘FTE’.

## Citation Analysis
- **Centile Profile**
- **Relative Citation Impact (RCI) Classes**
- **RCI against world and Australian benchmarks**
- Only applies to journal articles.
- Low volume threshold is 50 apportioned indexed journal articles.
- The citation supplier for 2012 is Scopus.
- The citation census date is 1 March 2012.

## Peer Review
- **Peer review**
- Applies to a range of outputs including journal articles, books, book chapters, non-traditional research outputs.
- Low volume threshold is 50 apportioned outputs (any type).
- Institutions nominate 30% of total output for a FoR for peer review.

## Esteem Measures
- **Editor of prestigious works of reference**
- **Recipient of, Category 1 Fellowship or Australia Council Grant or Fellowship**
- **Membership of, statutory committee or Learned Academy**
- Each individual esteem measure can be apportioned up to 3 four-digit FoRs of the institution’s choice.
- Esteem must be linked to an eligible researcher of the institution.
- Individual researchers cannot be identified through the esteem measures.
- Institutions can apportion each income item between as many four-digit FoRs as relevant.
- Number of grants is collected for Category 1 income only.
- FTE is used as a denominator for all Categories.
- Category 3 income is disaggregated into the 3 subcategories (Australian, International A and International B).

## Research Income
- **Category 1-4**
- Institutions can select up to 3 four-digit FoRs (apportioned) for each applied measure submitted, except for commercialisation income where there are no limits on the number of four-digit FoR codes submitted.
- Applied measures are linked to either the institution or individual eligible researchers.

## Applied measures
- **Patents**
- **Commercialisation Income**
- **Plant Breeder’s Rights**
- **NHMRC Endorsed Guidelines**
- **Registered Designs**
Stages of Evaluation

Stage 1
REC Members evaluate assigned material and record preliminary evaluations in SEER

Stage 2A
REC Members are given access to the preliminary evaluation outcomes for 4-digit UoEs from other REC Members and Peer Reviewers’ evaluations for moderation. REC Members complete preliminary evaluation of 2-digit UoEs.

Stage 2B
REC Members are given access to the preliminary evaluation outcomes for 2-digit UoEs from other REC Members and Peer Reviewers’ evaluations for moderation.

Stage 2C
REC Members are given view only access to moderated 2- & 4-digit evaluations to prepare for Stage 3 meeting.

Stage 3
REC Members meet to finalise all UoE ratings

ERA National Report
## The ERA rating scale

<table>
<thead>
<tr>
<th>Rating</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>The Unit of Evaluation profile is characterised by evidence of outstanding performance <strong>well above world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>4</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>above world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>3</td>
<td>The Unit of Evaluation profile is characterised by evidence of average performance <strong>at world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>2</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>below world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>1</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>well below world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
</tbody>
</table>
## ERA 2015 Reference Periods

<table>
<thead>
<tr>
<th>Data type</th>
<th>Reference period</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research outputs</td>
<td>1 Jan 2008-31 Dec 2013</td>
<td>6</td>
</tr>
<tr>
<td>Research income</td>
<td>1 Jan 2011-31 Dec 2013</td>
<td>3</td>
</tr>
<tr>
<td>Applied measures</td>
<td>1 Jan 2011-31 Dec 2013</td>
<td>3</td>
</tr>
<tr>
<td>Esteem measures</td>
<td>1 Jan 2011-31 Dec 2013</td>
<td>3</td>
</tr>
</tbody>
</table>

Staff census date: 31 March 2014
High Level Changes

• Gender Data
• Open Access
• Submission Stage 0
• Treatment of Revisions, Reprints and Multiple Editions
• Digital Storage of Research Outputs Nominated for Peer Review
• ERA Submission Publisher ID
• ERA Submission Conference ID
• Publication Association for Staff Employed < 0.4 FTE
• New Category of Non-Traditional Research Outputs
• Nomination of Research Outputs for Peer Review
• Peer Review Reporting
Research Report for an External Body

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

The new category was created following a review of ERA 2012. It recognises that for many disciplines, submitting research reports would be better represented in this new category instead of under the subcategory Original Creative Works which was used for ERA 2012.

To be eligible to be submitted, a research report must:

- Meet the definition of research
- Not be eligible to be submitted as a traditional research output and
- Have been made publicly available during the reference period for research outputs.
Research Report for an External Body cont’d

There are the following subcategories for research reports:

- **Public Sector** - A research report that has been undertaken for an Australian, state, territory, local, foreign or international government body or organisation
- **Industry** - A research report that has been undertaken for a company, industry organisation, industry peak body, or an employer/employee association
- **Not-For-Profit** - A research report that has been undertaken for a body or organisation operating in the not-for-profit sector
- **Other**

In general, the following types of outputs will be ineligible:

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

**Portfolios** are eligible for submission the research report subcategory only for the fields of research in which other NTRO types can be submitted.
Research Report for an External Body cont’d

Research Reports may be submitted for both peer review disciplines and citation disciplines.

For *citation* disciplines:
- Information about the reports will be available to the ERA reviewers as part of the publication profile
- Information will also appear in the volume and activity reporting for the relevant unit of evaluation
- If the institution chooses, reference to research reports can also be made in the relevant explanatory statements
- However, the reports **will not** form part of the citation analysis for these disciplines.

In addition, for *peer review* disciplines:
- Research reports will be evaluated in the same manner as other NTROs and will form part of the peer review sample for NTROs.
Nomination of Outputs for ERA Peer Review

In the peer review disciplines, universities are required to provide a 30% sample of the research outputs in the 4 digit unit of evaluation for ERA peer review.

For ERA 2015:
• The sample should be drawn from a representative sample of the eligible researchers within the unit of evaluation
• The sample must include 30% of apportioned outputs (rounded up to the nearest integer) for each of the following output types in the unit of evaluation:
  • Books
  • Book Chapters
  • Journal Articles
  • Conference Papers
  • Non Traditional Research Outputs
• There is no minimum threshold for the 30% sample of research output types. For example, if only one NTRO is submitted within a unit of evaluation, that NTRO must be nominated for peer review.
Peer Review ‘Ratings’

• Peer reviewers do not rate a unit of evaluation against the ERA rating scale – that is the role of the Committee, taking account of all indicators and reviewer reports.

For ERA 2015:

• It will be required that all ERA reviewers in peer review disciplines report on the ‘proportions’ of peer reviewed outputs on a broad scale of ‘quality’ - from ‘lowest’ to ‘highest’ quality
• These quality judgments will be reported to universities with the dashboard for each assessed UoE, together with a discipline average.
Peer Review Reports – Criteria and Quality Distribution

• Peer reviewers develop their reports to the RECs based on two criteria: Approach and Contribution
• The reviewers will assign a percentage (which will sum to 100%) of research outputs, which reviewer judges to be in a particular quality tier. For example:

<table>
<thead>
<tr>
<th>Tier 1 – Lowest Quality</th>
<th>Tier 2</th>
<th>Tier 3</th>
<th>Tier 4 – Highest Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>30%</td>
<td>50%</td>
<td>10%</td>
</tr>
</tbody>
</table>

• The quality distribution in this scale should **align with the responses** given for the criteria of *Approach* and *Contribution*
Example Feedback

% of reviewed output in each Tier by Reviewer and Discipline Average

Tier 1 Tier 2 Tier 3 Tier 4 - Highest Quality

Reviewer1
Reviewer2
Reviewer3
Reviewer4
Reviewer5
Reviewer6
Reviewer7
Reviewer8
Reviewer9
Discipline Average
Thank you