Excellence in Research for Australia
ANZAM, 12/6/13

Christopher Marshall (Assistant Director)
Sophie Holloway (Assistant Director)
Objectives of ERA

- Establish an *evaluation framework*;
- Provide a *national stock take* of discipline-level research;
- Identify *excellence* across the full spectrum of research performance;
- Identify *emerging research areas* and *opportunities for further development*;
- Allow for *comparison* of Australia’s research *nationally* and *internationally* for all discipline areas.
Introduction to ERA

- ERA is a \textit{retrospective evaluation} of research performance: 2005-2010 for research outputs, 2008-2010 for other data.
- The \textit{ERA unit of evaluation} (UoE) is the discipline within the institution, \textbf{not} individual researchers or institutional units.
- ERA does not rank institutions or units; each UoE is \textit{evaluated on its merits} against the rating scale.
ERA 2012 Reference Periods

- **2005** to **2008**: Outputs Reference period
- **2009** to **2010**: Income, applied, esteem period
- **2011** to **2012**: Staff census (March 31st)
- Additional period for citations
Key changes for ERA 2012

- Expansion and strengthening of *Peer Review*
- *Reassignment Exception*
- Consistent *Low Volume Threshold* for Peer Review Disciplines
- *Ranked journals and conferences* not used
- *Movement* from Citation Analysis to Peer Review Disciplines
- *Non-traditional* Research Outputs in social sciences
- Restructure of *clusters*
- Attribution of *Applied Measures* to individuals and institutions
### ERA Process Overview

<table>
<thead>
<tr>
<th>Citation Analysis or Peer Review</th>
<th>Journal Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume and Activity</td>
<td>Research Income</td>
</tr>
<tr>
<td>Applied Measures</td>
<td>Esteem</td>
</tr>
</tbody>
</table>

Note - There are no weightings

The **ERA 2012 National Report** presents data submitted as part of a comprehensive assessment by discipline of the research quality and research activity within Australia’s higher education institutions.
## 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>
<tr>
<td>NA</td>
<td>Not assessed due to low volume. The number of research outputs does not meet the volume threshold standard for evaluation in ERA.</td>
</tr>
</tbody>
</table>
The Peer Review Process

- 30% sample which is intended to be ‘representative’
- Peer reviewers are assigned for expertise and to take account of workload
- Minimum of two peer reviewers per UoE and each peer reviewer is assigned at least two UoEs
- Peer reviewers only get access to outputs – not other ERA data
- Peer reviewers read outputs and report on the unit of evaluation – not individual outputs
- Peer reviewer reports are advice to the REC members
- REC members also conduct peer review and have access to other ERA data
Peer Review Criteria

Approach
General statement about the approach of the group of outputs reviewed. This may include reference to methodology, appropriateness of outlet/venue, discipline specific publishing practices etc.

Contribution
General statement about the contribution of the group of outputs reviewed to the field and/or practice. This may include reference to timeliness, originality, significance of the research question, subsequent use by others and may include a general statement about its contribution nationally and/or internationally.
Peer Review Changes for ERA 2012

- Active construction of pool of potential reviewers in collaboration with the sector – numbers and expertise
- Six-digit expertise to ensure appropriate assignment
- Target workload to ensure spread of reading and to manage load
- Structured report form – target issues and advice about reviewer expertise
- Increased sample size (30%)
- Institutions nominate in which discipline multiple coded outputs are peer reviewed
Key ERA 2012 Documents

The following ERA 2012 documents are available at
http://www.arc.gov.au/era/default.htm:

- ERA 2012 Evaluation Handbook
- ERA 2012 Peer Reviewer Handbook
- ERA 2012 Submission Guidelines
- ERA 2012 Discipline Matrix
- ERA 2012 Journal List
- ERA Rating Scale
- ERA Indicator Principles
- ERA-SEER 2012 Technology Pack
- ERA-SEER 2012 Business Rules
2010 to 2012: Growth

Bigger and more productive

↑ research publications/outputs (413,477, up 24%)

↑ researchers and related staff (60,668, up 9%)

↑ outputs per researcher (10/FTE, up 6%*)

↑ patents (781, up 16%) and esteem measures (4485, up 11%)

↑ Competitive grant ($3.75 billion, up 18%) and other public sector income ($2.39 billion, up 25%)

* 6% based on 2005, 2006, 2007 and 2008 only
Growth in outputs

Difference in number of outputs by type: ERA 2012 compared to ERA 2010

- Recorded or Rendered Work
- Original Creative Work
- Live Performance
- Curated or Exhibited Event
- Conference Publication
- Book Chapter
- Book
- Portfolio of Non-Traditional Research Outputs

* Actual NTROs % increased, but are included in Portfolios
Quality: ERA 2010 Ratings

ERA ratings (4-digit)

- 1: 170
- 2: 389
- 3: 547
- 4: 393
- 5: 239

2010 (1738 UoEs)
Quality: ERA 2012 Ratings

ERA ratings (4-digit)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>67</td>
</tr>
<tr>
<td>2</td>
<td>266</td>
</tr>
<tr>
<td>3</td>
<td>583</td>
</tr>
<tr>
<td>4</td>
<td>457</td>
</tr>
<tr>
<td>5</td>
<td>308</td>
</tr>
</tbody>
</table>

2012 (1681 UoEs)
Income and quality

HERDC income Cat 1-3 by rating - 2012

Category 1
Category 2
Category 3
ERA – Next Steps

• Minister has announced *ERA 2015*

• ERA Public Consultation (March 2013) – open consultation on issues related to submission and evaluation

• Outreach sessions with institutions

• Detailed feedback from ERA 2012 REC members and peer reviewers

• Outreach sessions with peak bodies

• Further consultation – including Discipline Matrix
Further information

Web: www.arc.gov.au/era

Email: era@arc.gov.au

Hotline: 02 6287 6755